Gníomhaireacht Éileamh an Stáit
State Claims Agency

Inspection and Testing of Equipment and Machinery - Regulatory Requirements

Part 2: Scheduling

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Introduction

The information contained in this document should assist your Authority in complying with its legal obligations in relation to inspecting and testing of equipment and machinery. It should be used as a guide when planning, scheduling and monitoring inspections and testing.

Pages 1 and 2 contain a table summarising the various requirements for inspections and testing of all listed equipment.

The remainder of the document describes the inspection and testing required for each type of equipment/machinery listed, according in order of testing frequency. For each item the following details are provided:

- Applicable Statutory Instrument (SI), Code of Practice or Standard;
- Requirements of relevant SI, Code of Practice or Standard – this provides a summary of the minimum inspection requirements for each piece of equipment/machinery. In some cases it may be necessary to refer to the original documents such as Standard, SI etc. for full details.

This is a non-exhaustive list of equipment and machinery, and their required inspections. It is strongly recommended that each Authority conduct a review of all equipment and machinery, this should involve:

- development of a register of all machinery and equipment;
- identification of inspection and testing requirements, including timeframes, for each type or item of equipment;
- detail of who is responsible for carrying out the testing and inspection. Where this involves a third party, list this party and the person within your organisation responsible for liaising and monitoring with the third party service.

It should also be noted that this is not an exhaustive list of legislation, codes of practice or standards that may apply to the management of health and safety or fire safety risk in your Authority.

Should you require any further information in relation to the information in this document or in respect of items of machinery or equipment not covered in this document please do not hesitate to contact the State Claims Agency, Risk Management Unit.

Reference sources

(1) Statutory Inspections

Checks, inspections or tests specified in legislation i.e. Act and/or Regulation and that are a legal requirement.

(2) Irish Standard (IS)

Refers to Irish Standards published by National Standards Association of Ireland (NSAI), which operates under the National Standards Authority of Ireland Act, 1996, on behalf of the Minister for Jobs, Enterprise and Innovation. These are standard specifications for their topic area and conformance with the standard as certified by NSAI provides proof of compliance with requirements of national standard specifications approved by The Minister for Jobs, Enterprise and Innovation.

(3) Irish Standard EN (IS EN)

EN standards aim to establish a European wide standard in a given subject area. European Standards are typically produced by European technical committees and must be given the status of a national standard, either by publication of an identical text or by endorsement and conflicting national standards must be withdrawn. These standards when transposed into an Irish context are denoted as IS EN.

(4) Code of Practice

Approved Codes of Practice typically offer advice on compliance with certain legislation in relation to their subject matter. Where the code of practice gives practical guidance on relevant statutory provisions then compliance or non-compliance with those provisions of the code may be admissible in evidence in any criminal or civil proceedings.

A person may also be able to comply with the law by adopting alternative measures to those set out in a Code of Practice, provided that those alternative measures achieve the objective of the statute or Regulation to which the Code of Practice relates. However, in a safety and health prosecution or a civil liability claim the onus of proof would rest with the defendant to show that he/she was not negligent and/or in breach of a statutory duty and that all reasonable measures were adopted to prevent against injury.

(5) British Standard (BS)

Standards produced by the British Standards Institute. These are referenced in this text only where an applicable Irish Code of Practice or Standard (either IS or IS EN) does not exist. *IS, IS EN or Irish Codes of Practice should always take precedence over BS.* Where a BS requires a more frequent inspection or testing schedule than an IS, this has been included as a best practice suggestion.

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Inspection & testing frequencies

Equipment	Prior to use	Regular intervals	Daily	Weekly	Monthly	3 Monthly	6 Monthly	1 Year	2 Years	3 Years	4 Years	5 Years	10 Years	Manf./Installer inst.
Fire														
Fire Hydrants		X		X				X						
Fire Extinguishers			X[1]		X			X						
Fire Hose Reels		X	X[1]		X			X				X		
Sprinkler Systems				X	X	X	X	X		X			X	
Fire Detection and Alarm Systems			X	X		X		X						X
Fire Mains (Wet & Dry Risers)							X	X						
Fire Doors					X		X							
Emergency Lighting			X	X	X[2]	X		X			X			
Automatic Door Releases			X[1]	X	X		X	X						
Gas Installations		X						X						X
Gas Detection Systems														X
Smoke Control Systems		X		X		X		X						X
Ventilation & air conditioning ductwork[3]		X[4]							X					

Notes:

1 Based on BS9999:2008

[2] Automatic Systems for Battery Powered Emergency Escape Lighting

[3] See section on Smoke Control Systems

[4] In a period not exceeding 2 years

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Inspection & testing frequencies

Equipment	Prior to use	Regular intervals	Daily	Weekly	1 Month	3 Month	6 Month	1 Year	14 Months	2 Years	26 Months	Manf./Installers inst.
Electrical												
Electric Power Generators								X				
Residual Current Devices (RCDs)		X			X	X						
Earth Loop Impedance System		X										
Lifting Equipment / Working at Height												
Passenger / Goods Lifts		X					X					X
Hoist / Mobile Elevated Work Platform							X					
Ladders	X	X										X
Personal Fall Protection Equipment	X	X				X[1]	X					X
Forklifts	X						X[2]	X				X
Lifting Accessories / Lifting Equipment				X[3]			X[4&5]	X[4]				
Vehicle LIfting Tables								X				X
Miscellaneous												
Steam Boilers									X			
Steam Receivers / Air Receivers											X	
Work Equipment		X										X
X-Ray Units								X				X
Dental X-Ray Units								X		X		X
Goalposts	X	X	X[6]	X				X				X

Notes:	[1] For lanyards used in arduous conditions
	[2] If adapted or equiped for lifting persons
	[3] If used on a construction site
	[4] If used to lift persons every 6 months. If used to lift materials every 12 months
	[5] This includes a thourough examination of items provided for the support of lifting equipment
	[6] If installed in a public place. See regular interval section.

DAILY

ITEM	SI/CODE/STANDARD	SUMMARY OF INSPECTION REQUIREMENTS
	DAILY	
Fire detection & alarm systems	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • IS 3218:2009 Fire Detection and Alarm Systems for Buildings: System Design, Installation and Servicing.	A check shall be made every day to ascertain the following: a) that either the panel indicates normal operation, or if not, that any fault indicated is recorded in the Log Book and that the other actions recommended below have been taken. After a fault, the user should carry out the following: 1) determine the area affected by the fault and decide whether special action (such as fire patrols) are needed in that area, 2) if possible, determine the reason for the fault, or note the activities immediately prior to the fault in the area affected, 3) record the fault in the log book, inform the organisation responsible for servicing and arrange for testing and take further action as appropriate. b) that any fault warning recorded the previous day has received attention. If any connection to a remote manned centre is not continuously monitored then it should be tested daily in accordance with the supplier's instructions.
Automatic door releases	• BS 9999:2008 Code of practice for fire safety in the design, management, use of buildings[1]	All doors that are held open by automatic release mechanisms should be released daily.
Emergency lighting	• BS 9999:2008 Code of practice for fire safety in the design, management and use of buildings[1]	It is advised the following be checked daily: a) Every lamp is lit if the system is maintained; b) The control panel for any central battery system or generator indicates normal operation; c) Any fault found is logged and the appropriate action(s) taken.
Portable fire extinguishers & hose reels	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • BS 9999:2008 Code of practice for fire safety in the design, management and use of buildings[1]	All points where hose reels and fire extinguishers are located should be inspected daily. Missing/damaged fire extinguishers or hose reels should be replaced/repaired immediately.

[1] Please see Reference Sources (5) British Standards for guidance on recommendations made here with regard to BS 9999:2008 and daily inspections

WEEKLY

ITEM	SI/CODE/STANDARD	SUMMARY OF INSPECTION REQUIREMENTS
WEEKLY		
Lifting equipment[2]	• Safety, Health and Welfare at Work Act (General Application) Regulations 2007.	Lifting equipment used on a construction site should be examined weekly by the user as regards features related to its safe working and a record of the results is kept in a suitable form which is kept available for inspection by an inspector for 3 months from the date of examination.
Fire detection and alarm systems	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • IS 3218:2009 Fire Detection and Alarm Systems for Buildings: System Design, Installation and Servicing.	On one day each week the daily test will be incorporated in the weekly test which should also include the following tests to ensure that the system is capable of operating under alarm conditions: a) at least one detector, call point or end of line switch on at least one zone[3] shall be operated to test the ability of the control and indicating equipment to receive a signal and to sound the alarm and operate any other warning devices. For systems having 13 zones or less, each zone shall be tested in turn; if there are more than 13 zones then more than one zone shall be tested in any week so that the interval between tests on any one zone does not exceed 13 weeks. It is preferable that each time a particular circuit is tested a different trigger device is used. An entry shall be made in the log book quoting the particular trigger device that has been used to initiate the test. b) If operation of the alarm sounders has been prevented by disconnection then a further test shall be carried out to prove the final reinstatement of the sounders, and, if permissible, of the alarm transmission circuits. c) A visual examination of the standby supply and its connections shall be made to ensure that they

[2] Means work equipment for lifting, lowering loads or pile driving, and include anything used for anchoring, fixing or supporting such equipment.
[3] A section of the protected premises where the occurrence of a fire within it will be indicated by a fire alarm system separately from an indication of fire in any other section.

ITEM	SI/CODE/STANDARD	SUMMARY OF INSPECTION REQUIREMENTS
		d) are in good condition. Action should be taken to remedy any defect, including low electrolyte level. e) The fuel, oil and coolant levels of any standby generator shall be checked and topped up as necessary. f) Any printer should be checked to ensure that its reserves of paper, ink or ribbon are adequate for at least 2 weeks normal usage. All defects shall be recorded in the log book and reported to the responsible person
Emergency lighting	• I.S. 3217: 2008 Emergency Lighting	A test shall be made once every seven days to ascertain that: a) A fault recorded in the log book has been given urgent attention and the action noted, b) every lamp in a maintained system is lighting, c) the main control or indicating panel of each central battery system indicates normal operation, d) the main control or indicating panel of each engine driven generator plant indicates normal operation. After inspection the system shall be started and run to recharge the batteries, and to allow each luminaire to be checked for correct operation, e) the LED in charging circuit is illuminated f) any fault found is recorded in the log book and the action taken noted

ITEM	SI/CODE/STANDARD	SUMMARY OF INSPECTION REQUIREMENTS
Sprinkler systems	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • IS EN 12845:2004 + A2:2009. Fixed firefighting systems : automatic sprinkler systems : design, installation and maintenance	The following shall be checked and recorded weekly: (a) All water and air pressure gauge readings on installations, trunk mains and pressure tanks; (b) All water levels in elevated private reservoirs, rivers, canals, lakes, water storage tanks (including pump priming water tanks and pressure tanks); (c) The correct position of all main stop valves. **Automatic pump starting test** Tests on automatic pumps shall include the following; a) fuel and engine lubricating oil levels in diesel engines shall be checked; b) water pressure on the starting device shall be reduced, thus simulating the condition of automatic starting; c) when the pump starts, the starting pressure shall be checked and recorded; d) the oil pressure on diesel pumps shall be checked, as well as the flow of cooling water through open circuit cooling systems. **Diesel engine restarting test** Immediately after the pump start test of the automatic pump starting test clause, diesel engines shall be tested as follows: a) the engine shall be run for 20 min, or for the time recommended by the supplier. The engine shall then be stopped and immediately restarted using the manual start test button; b) the water level in the primary circuit of closed circuit cooling systems shall be checked. Oil pressure (where gauges are fitted), engine temperatures and coolant flow shall be monitored throughout the test. Oil hoses shall be checked and a general inspection made for leakage of fuel, coolant or exhaust fumes.

ITEM	SI/CODE/STANDARD	SUMMARY OF INSPECTION REQUIREMENTS
Smoke control systems	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • EN 12101 "Smoke and heat control systems" • BS 9999:2008 Code of practice for fire safety in the design, management and use of buildings	Actuation of the system should be simulated once a week. It should be ensured that any fans and powered exhaust ventilators operate correctly, smoke dampers close (or open in some systems), natural exhaust ventilators open, automatic smoke curtains move into position, etc.
Automatic door releases	• BS 7273-4:2007 Code of practice for the operation of fire protection measures –Part 4: Actuation of release mechanisms for doors • BS 9999:2008 Code of practice for fire safety in the design, management and use of buildings	Every week a fire alarm signal(s) should be used to cause actuation of all release mechanisms to ensure proper operation.
Fire hydrants	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • BS 9999:2008 Code of practice for fire safety in the design, management and use of buildings	All fire hydrants should be inspected once a week. In particular, it should be ensured that there are no obstructions impeding access, that the indicator plates are in position, and that the isolating valves are locked open. This standard also recommends annual checks but does not specify content or responsible party.
Goalposts	• I.S. 357:2007 playing field Equipment – Goals. Code of Practice on the Procurement, Installation, Maintenance Inspection and Storage.	It is advised this is carried out at least once a week and/or before any game, training activity or event. This inspection is intended to enable the identification of obvious hazards that can result from vandalism, misuse or general deterioration. Typical hazards to consider include: • Damage to the goal frame • Lack of / insufficient anchorage or stability equipment • Damaged or missing fixings • Damaged nets / damaged or missing net fixings Examples of visual inspection are stability, anchorage, excessive wear, structural integrity and alignment. May be increased depending on conditions/usage of goals.

MONTHLY

ITEM	SI/CODE/STANDARD	SUMMARY OF INSPECTION REQUIREMENTS
		MONTHLY
Automatic systems for battery powered emergency escape lighting	• I.S E.N. 62034:2007 Automatic Systems for Battery Powered Emergency Escape Lighting	As per requirements in I.S E.N. 62034:2007 Automatic Systems for Battery Powered Emergency Escape Lighting a functional test should be performed at least once a month on Automatic Test systems for Emergency escape lighting and the test duration shall be sufficient to check the illumination of the lamp and shall not be longer than 10% of the rated duration For full rated duration a test shall be performed according to the manufacturer's instructions at the commissioning of the ATS and repeated automatically at least annually.
Fire extinguishers (all types)	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • I.S. 291:2002 - The Use, Siting, Inspection and Maintenance of Portable Fire Extinguishers	(a) The extinguisher is in its designated place; (b) Access to or visibility of the extinguisher is not obstructed; (c) Any seals or indicator tabs are not broken; (d) Pressure indicators, where fitted, show the correct pressure; (e) The extinguisher has not been damaged; (f) The extinguisher does not have obvious defects such as a clogged nozzle, corrosion, leakage or a loose or damaged hose; (g) In the case of all carbon dioxide gas extinguishers the discharge horn or hose/horn is properly secured; (h) The maintenance record label is properly attached to the extinguisher and is up to date and the maintenance register is entered up to date; A service certificate should be issued for record purposes.
Automatic door releases	• BS 9999:2008 Code of practice for fire safety in the design, management and use of buildings	The operation of fail-safe mechanisms should be tested once a month, either by "breaking-out" the doorset or by simulating failure of the mains power supply, as appropriate.

ITEM	SI/CODE/STANDARD	SUMMARY OF INSPECTION REQUIREMENTS
Sprinkler systems	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • IS EN 12845:2004. Fixed firefighting systems : automatic sprinkler systems : design, installation and maintenance.	The electrolyte level and density of all lead acid cells (including diesel engine starter batteries and those for control panel power supplies) shall be checked. If the density is low the battery charger shall be checked and, if this is working normally, the battery or batteries affected shall be replaced. Any procedures recommended by component suppliers shall be carried out.
Fire hose reels	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • IS EN 12845:2004 +A2:2009. Fixed firefighting systems: Automatic sprinkler systems -Design, installation, maintenance.	Hose reels should be visually inspected **once a month**. In particular, it should be ensured that there are no leaks and that drum assemblies are free to rotate on their spindles.
Fire doors	• IS EN 179:2008: Building Hardware – Emergency exit devices operated by lever handle or push pad, for use on escape routes – requirements and test methods	To ensure performance in accordance with IS EN 179:2008, the following routine maintenance checks should be undertaken at intervals of not more than **one month** (or the period recommended by the producer). a) Inspect and operate the emergency exit device to ensure that all components are in a satisfactory working condition. Using a force gauge, measure and record the operating forces to release the exit device. b) Ensure that the keeper(s) is (are) free from obstruction. c) Check that the emergency exit device is lubricated in accordance with the producer's instructions. d) Check that no additional locking devices have been added to the door since its original installation. e) Check periodically that all components of the system are still correct in accordance with the list of approved components originally supplied with the system. f) Check periodically that the operating element is correctly tightened and, using a force gauge, measure the operating forces to release the exit device. Check that the operating forces have not changed significantly from the operating forces recorded when originally installed.

QUARTERLY

ITEM	SI/CODE/STANDARD	SUMMARY OF INSPECTION REQUIREMENTS
QUARTERLY		
Fire detection and alarm systems	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • IS 3218:2009 Fire Detection and Alarm Systems for Buildings: System Design, Installation and Servicing	The responsible person shall ensure that every 3 months the following checks are carried out by a competent person: a) Entries in the log book shall be checked and any necessary action taken, b) Where applicable, batteries should be examined to ensure that the specific gravity of electrolyte in each cell is correct. Any necessary remedial action shall be taken, c) Batteries, including reserves, shall be tested as specified by the supplier to verify that they are satisfactory for a further period of use by taking measurements that are indicative of the conditions of each cell, by the use of a proprietary load test meter specific for the purpose. The test conditions and the significance of the readings will depend on the type of cell and the use to which it is being put. These should be clearly specified by the supplier or commissioning company and applied with care. Batteries shall be replaced within the period of the service life stipulated by the battery manufacturer. These requirements need not be applied to batteries which power individual items of equipment (such as detectors or sounders) and which have provision for monitoring as required in 5.15.2.3, d) The alarm functions of the control and indicating equipment shall be checked by the operation of a detector or call point in each zone as described in 8.2.2.4. The operation of the alarm devices and any link to an alarm receiving centre (ARC) shall be tested. All ancillary functions of the control panel shall also be tested where practicable. All fault indicators and their circuits shall be checked, preferably by simulation of fault conditions. The control and indicating equipment shall be visually inspected for signs of moisture ingress and other deterioration. *NOTE* It is recommended that during the quarterly/periodic service a percentage of the detection devices be

ITEM	SI/CODE/STANDARD	SUMMARY OF INSPECTION REQUIREMENTS
		tested such that at the end of the annual period all devices have been tested. This will be deemed to satisfy the requirements of 8.2.2.6 b) provided that adequate records have been maintained to guarantee that 100 % of the devices have been suitably tested. The operation of sounders/visual alarm indicator shall be checked such that at the end of the annual maintenance period 100 % of all devices have been tested, e) A visual inspection shall be made to check whether structural or occupancy changes have affected the requirements for the siting of manual call points, detectors and sounders. The visual inspection shall also confirm that a clear space of at least 500 mm is preserved in all directions below and around every detector, that the detectors are sited in accordance with 5.10.3 and/or 5.10.4 and that all manual call points remain unobstructed and conspicuous, f) All further checks and tests specified by the installer, supplier or manufacturer shall be carried out, g) Particular attention should be made to areas where alterations to the system have been carried out since the last inspection. Any defect shall be recorded in the log book and reported to the responsible person, and action should be taken to correct it on the instructions of the responsible person. On completion of the work, a Certificate of Servicing/Testing shall be given to the responsible person. The certificate shall indicate its validity/expiry date (see Annex D 1 and Annex D 2 of 1s 3218:2009). For non-residential systems of two zones or less which incorporate a combination of less than 20 automatic detection devices or call points, then 3-monthly inspection may be extended to 6 months provided the user/responsible person has been adequately trained and can undertake items a), b) and d) above.
Emergency lighting	• I.S. 3217: 2008 Emergency Lighting • I.S E.N. 62034:2007 Automatic Systems for Battery Powered Emergency Escape Lighting	An inspection should be made quarterly in accordance with a systematic schedule. Tests should be carried out as follows: a) Each self-contained luminaire and internally illuminated escape route sign shall be energized from its battery by simulation of a failure of the supply to the normal lighting for the required period set out below:

ITEM	SI/CODE/STANDARD	SUMMARY OF INSPECTION REQUIREMENTS
		• functional test of 18 minutes maximum (ATS[4] only), • functional test of 30 minutes (all test facilities except ATS), • full duration test of 3 hours (all test facilities). The time should not exceed one quarter of the rated duration of the luminaire or sign. During this period all luminaires and/or signs shall be examined visually to ensure that they are functioning correctly. b) Each central battery system shall be energized from its battery by simulation of a failure of the supply to the normal lighting for a period of at least 30 min but not exceeding one quarter of the rated duration of the battery. During this period all luminaires and/or signs shall be examined visually to ensure that they are functioning correctly. If it is not possible to examine visually all luminaires and/or signs in this period, further tests shall be made after the battery has been fully recharged. The charging arrangements for the battery shall be checked for proper functioning after the test by current and voltage measurements. c) Each engine-driven generating plant shall be started up by a simulation of a failure of the supply to the normal lighting and allowed to energize the emergency lighting system for a continuous period of at least 1 h. During this time all luminaires and/or signs shall be examined visually to ensure that they are functioning correctly. At the end of the test period the system shall be restored to normal operation and the charging arrangements for the engine-starting battery shall be checked for proper functioning after the test by current and voltage measurements. The fuel tanks shall be left filled and the oil and coolant levels topped up as necessary. The contents of the bulk tank, if provided, shall be noted.

[4] Automatic test system (ATS) - automated test system that may be manually initiated, consisting of parts (such as timers, current detectors, light detectors, change over switches) which, when connected together, make a system that can carry out the routine testing requirements of emergency lighting luminaires, and indicate the test results

ITEM	SI/CODE/STANDARD	SUMMARY OF INSPECTION REQUIREMENTS
		d) Where back-up lighting batteries are used on an engine-driven generator system, the engine shall be prevented from starting. The emergency lighting system shall then be energized solely form the back-up battery by simulation of a failure of the supply to the normal lighting for a period of at least 30 min but not exceeding one quarter of the rated duration of the battery, in order to ensure that the changeover from normal supply to battery is functioning properly. After this check the starting system engine shall be returned to normal operation and the engine allowed to start up in the normal way to energize the emergency lighting system for a continuous period of at least 1 h. During these periods all luminaires and/or sign shall be examined visually to ensure that they are functioning correctly. At the end of the test period the system shall be restored to normal operation and the charging arrangements for the back-up and the engine starting batteries checked for proper functioning. The fuel tanks shall be left filled and the oil and coolant levels topped up as necessary. The contents of the bulk tank, if provided, shall be noted.
Sprinkler systems	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • IS EN 12845:2004 + A2:2009. Fixed firefighting systems : automatic sprinkler systems : design, installation and maintenance	The following checks and inspections shall be made: (a) Review of hazard (b) Sprinklers, multiple controls and sprayers (c) Pipework and pipe supports (d) Electrical supplies (e) Water supplies and their alarms (f) Stop valves (g) Flow switches The number and condition of replacement parts held as spare shall be checked.

ITEM	SI/CODE/STANDARD	SUMMARY OF INSPECTION REQUIREMENTS
Smoke control systems	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • BS 9999:2008 Code of practice for fire safety in the design, management and use of buildings	The actuation of all smoke control systems should be simulated once **every three months.** All zones should be separately tested and it should be ensured that any fans and powered exhaust ventilators operate correctly, smoke dampers close (or open in some systems), etc.
Personal fall protection equipment (Laynards)	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • Inspecting fall arrest equipment made from webbing or rope, The Health and Safety Executive, UK	Frequently used lanyards should be inspected every 3 months, particularly if the equipment is used in arduous environments. (e.g. demolition, steel erection, scaffolding, steel skeletal masts/towers with edges and protrusions). Detailed inspections should be recorded.

6 - MONTHLY

ITEM	SI/CODE/STANDARD	SUMMARY OF INSEPCTION REQUIREMENTS
6-MONTHLY		
Lifting accessories/ equipment[5]	• Safety, Health and Welfare at Work Act (General Application) Regulations 2007	Should undergo a thorough examination by a competent person. A report in the form prescribed in Schedule 1 to the regulations should be prepared (See Appendix 1) Lifting machines used for personnel should undergo a thorough examination every 6 months.
Hoist and passenger goods lifts including **Mobile elevating work platform**	• Safety, Health and Welfare at Work Act (General Application) Regulations 2007	Hoists and lifts should undergo a thorough examination once every **6 months** according to the requirements of the regulations. Mobile Elevating Work Platforms should undergo a thorough examination once every **6 months** according to the requirements of the regulations. A report containing details required under Schedule 1 to regulations of the results of every such examination should be produced. (See Appendix 1)
Fork lift trucks including interchangeable accessories: *only those enabled or adapted to lift persons*	• Safety, Health and Welfare at Work Act (General Application) Regulations 2007	Should undergo a thorough examination by a competent person. A report in the form prescribed in Schedule 1 to the regulations should be prepared (See Appendix 1)
Automatic door releases	• BS 7273-4:2007 Code of practice for the operation of fire protection measures –Part 4: Actuation of release mechanisms for doors	(a) The logbook for the fire detection and fire alarm system should be examined. **(b)** A visual inspection should be made to check whether structural or occupancy changes have affected compliance.

[5] Includes clamps and similar attachments, chain slings, rope slings, rings, hooks, shackles, swivels, spreader beams, spreader frames and any other item placed between lifting equipment and the load or on the load in order to attach it, but excluding features of the load used for its lifting.

ITEM	SI/CODE/STANDARD	SUMMARY OF INSEPCTION REQUIREMENTS
	• BS 9999:2008 Code of practice for fire safety in the design, management and use of buildings	**(c)** Any batteries should be checked in accordance with the equipment manufacturer's instructions. **(d)** All fire alarm sounders needed for correct operation of acoustically actuated release mechanisms should be checked. (e) Any fault indicators necessary for compliance should be checked, where practicable, by simulation of fault conditions. **(f)** All further checks and tests recommended by the manufacturer of the release mechanisms and associated equipment should be carried out. **(g)** On completion of the work, any outstanding defects should be reported to the responsible person, an entry should be made in the logbook of the fire detection and fire alarm system and a servicing certificate should be issued.
Sprinkler systems	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • IS EN 12845:2004. + A2:2009 - Fixed firefighting systems : automatic sprinkler systems : design, installation and maintenance.	Inspection should include: Dry alarm valves -The moving parts of dry alarm valves, and any accelerators and exhausters; in dry pipe installations and subsidiary extensions shall be exercised in accordance with the supplier's instructions. Fire brigade and remote central station alarm - the electrical installation shall be checked.
Personal fall protection equipment	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • BS 8437:2005 Code of practice for selection, use and maintenance of personal fall protection systems and equipment for use in the workplace • Inspecting fall arrest equipment made from webbing or rope, The Health and Safety Executive, UK	**BS EN 365:2005:** Formal inspection procedures should be put in place by employers to ensure that personal fall protection equipment is given a detailed inspection ("thorough examination") by a competent person before first use and at intervals not exceeding six months (or three months where the equipment is used in arduous conditions), and after circumstances liable to jeopardise safety have occurred. **HSE Guidance**: Formal inspection procedures should be put in place by employers to ensure that personal fall protection equipment is given a detailed inspection ("thorough examination") by a competent person before first use and at intervals not exceeding six months and after circumstances liable to jeopardize safety have occurred.
Fire door	• BS 9999:2008 Code of practice for fire safety in the design, management and use of buildings	All fire doors should be inspected every six months. In particular, it should be ensured that: a) heat-activated seals and smoke seals are undamaged;

ITEM	SI/CODE/STANDARD	SUMMARY OF INSEPCTION REQUIREMENTS
		b) door leaves are not structurally damaged or excessively bowed or deformed; c) gaps between the door leaf and the frame are not so small as to be likely to bind, or so large as to prevent effective fire and smoke-sealing; d) hanging devices, securing devices, self-closing devices and automatic release mechanisms are operating correctly.
Fire mains (dry and wet riser)[6]	• Safety, Health and Welfare at Work (General Application) Regulations, 2007; • BS 9999:2008 Code of practice for fire safety in the design, management and use of building; • BS 9990:2006 Code of practice for non-automatic fire-fighting systems in buildings.	**Dry fire mains (BS 9990)** Inlets, landing valves, drain valves, door hinges and locking arrangements to the inlet and landing valve boxes should be inspected every **six months.** Special attention should be given to all valves, spindles, glands and washers to ensure that they are in satisfactory condition, so that all equipment is ready for immediate use. **It should be ensured that: (BS 9999)** All fire mains should be inspected every **six months**. In particular, it should be ensured that: **a)** inlets, landing valves, drain valves, door hinges and locking arrangements for inlet and landing valve boxes are ready for immediate use, and spindles, glands and washers are in a satisfactory condition; **b)** for wet mains: 1. booster pumps and their associated mechanical and electrical apparatus are functioning correctly; 2. storage tanks are full of clean water.

[6] BS 9999 defines a fire main as a water supply pipe, fitted with an outlet and control valve at specified points, installed in a building for fire-fighting purposes

ANNUALLY

ITEM	SI/CODE/STANDARD	SUMMARY OF INSEPCTION REQUIREMENTS
ANNUALLY		
Fork lift trucks including interchangeable accessories	• Safety, Health and Welfare at Work Act (General Application) Regulations 2007	Should undergo a thorough examination by a competent person. A report in the form prescribed in Schedule 1 to the regulations should be prepared (See Appendix 1)
Vehicle lifting tables	• IS EN 1570:1998 + A2: 2009 – Safety requirements of lifting tables	Should undergo a thorough examination once every **12 months** according to the requirements of the regulations.
Items provided for support of lifting equipment and lifting equipment	• Safety, Health and Welfare at Work Act (General Application) Regulations 2007	Items provided for support of lifting equipment and lifting machines (materials only) should undergo a thorough examination by a competent person every 12 months. A report in the form prescribed in Schedule 1 to the regulations should be prepared (See Appendix 1)
Fire detection and alarm systems	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • IS 3218:2009 Fire Detection and Alarm Systems for Buildings: System Design, Installation and Servicing**.**	The responsible person shall ensure that the following check and test sequence is carried out every year by competent person: a) the inspection and test routines detailed in the quarterly inspection, b) each detector shall be checked for correct operation in accordance with the manufacturer's recommendations , c) every manual call point shall be checked for correct operation by insertion of a test key or operation of the switch mechanism or other test which confirms the correct action of the switching mechanism and ability of the device to correctly communicate a fire signal to the control and indicating equipment. The test shall also confirm the correct operation of any indicator device on the call point and that the response time is within the parameters set out in IS 3218:2009 (In general the delay between operation of a call point and the giving of an audible or visual confirmation shall not exceed 3 s., a delay of up to 10 s may be acceptable, subject to the agreement of relevant

ITEM	SI/CODE/STANDARD	SUMMARY OF INSEPCTION REQUIREMENTS
		enforcing authority and recording of the delay as a variation on the Certificate of Completion), d) a visual inspection (as far as is reasonably practical) shall be made to confirm that all cable fittings and equipment are secure, undamaged and adequately protected, e) the required sound levels are achieved. It is strongly recommended that this be carried out in conjunction with the annual fire evacuation drill. **Heat detectors** Every heat detector, provided they are not of the type which requires replacement of the detector or any element of the detector following operation, shall be tested at least annually by the application of a suitable heat source. Care should be taken to ensure that the heat source has been designed for the application and is not likely to damage any part of the detection device or be a cause of ignition of fire. Naked flames shall not be used. Heat detectors which require replacement of the device or any element of the device following activation which cannot be tested by the application of a heat source should be tested at least annually in accordance with the manufacturers' instructions. **Point type smoke detector** Every detector shall be tested at least annually by a method which confirms that smoke can enter the detection chamber and activate the device. The product employed for the test of the detector (simulated smoke or aerosol) should be suitable for the application and should not cause damage to the device or impair its future detection ability. Test products recommended by the manufacturer should be employed or the manufacturers' approval should be sought for the use of alternative products. The use of magnets, remote switches, other electrical/electronic tests or interrogation of devices by software methods will not be acceptable.

ITEM	SI/CODE/STANDARD	SUMMARY OF INSEPCTION REQUIREMENTS
		Carbon Monoxide point detectors Each detector shall be tested as per requirements for Point type smoke detector above but employing Carbon Monoxide in accordance with the manufacturers' recommended concentration as the test medium. Alternatively any test medium recommended by the manufacturer which can simulate the reaction of the cell to carbon monoxide may be employed provided it also correctly simulates the ability of the carbon monoxide to enter the detection chamber. **Multi-sensors** Each device shall be tested annually to confirm its correct operation. Testing should be undertaken in accordance with the manufacturers' instructions and each sensing element shall be confirmed as being responsive to the medium being sensed i.e. smoke sensor shall react to smoke, heat sensors to heat and carbon monoxide sensors to carbon monoxide. **Air sampling/aspirating systems** Each detector shall be tested annually in accordance with the manufacturers' instructions and by a method which confirms that smoke can enter the detection chamber and activate the device. Each device shall be tested to confirm that smoke entering the furthest sampling hole is sensed at the detection chamber. **Beam Detectors** Linear beam detectors shall be tested at least annually in accordance with the manufacturers' instructions. Where optical filters are used to test the device the filter shall be of the correct obscuration for the particular device. Alternatively smoke or simulated smoke may be employed. **Flame detectors** The flame detector shall be checked for correct alignment for the hazard protected and tested in accordance with the manufacturers' instructions annually. Where UV or IR test torches are used they should match the detection characteristics of the sensor and in hazardous areas the test devices should also be suitably rated for the hazard area.

ITEM	SI/CODE/STANDARD	SUMMARY OF INSEPCTION REQUIREMENTS
		Other detectors Detectors other than those listed above shall be checked for correct operation and sensitivity in accordance with the manufacturers' recommendations. **Remounted detectors** If detectors, sounders or alarm indicators are removed from their mounting or circuit for any test, then a final verification check shall be carried out for correct operation after remounting. **System disconnection during testing** Care should be taken to minimise disruption of the normal use of a building by alarms sounding during detector testing. It is preferable that during testing of detectors as much as possible of the remainder of the system should continue to function normally. If detectors are removed from the system for testing or servicing, replacement detectors should be immediately provided to keep the system in normal operation, or separate provision should be made for surveillance of the unprotected area. **Systems using addressable detectors** Care should be taken during the servicing of systems in which the detector is itself coded. False information in respect of the origin of alarms could occur if individually coded detectors were incorrectly replaced. **Standby supply batteries** The test specified by the manufacturer under IS 3218:2009 shall be carried out at the intervals specified (a method of test likely to predict the failure of the battery in the interval between routine tests).
Electric power generators	• IS 3218:2009 Fire Detection and Alarm Systems for Buildings: System Design, Installation, Servicing and Maintenance	Checks for generators used in fire alarm and detection systems and Emergency Lighting are covered in relevant sections.

ITEM	SI/CODE/STANDARD	SUMMARY OF INSEPCTION REQUIREMENTS
Fire hydrants	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • BS 9990:2008 Code of practice for non-automatic fire-fighting systems in buildings	Arrangements should be made by the owners or the occupiers to ensure that, at least once a year, a competent person carries out maintenance on all private fire hydrants. In most cases these arrangements, subject to suitable financial provisions, can be made with the local water undertaking (local authority in this case) or the fire authority. The former might also be prepared to carry out any necessary repair work.
Emergency lighting	• I.S. 3217: 2008 Emergency Lighting • I.S E.N. 62034:2007 Automatic Systems for Battery Powered Emergency Escape Lighting • I.S E.N 60598-2-22 Luminaries — Particular requirements — Luminaries for emergency lighting	The three-monthly test shall be carried out and the following additional tests made: (a) each emergency lighting installation shall be tested and inspected to ascertain compliance with this Standard; (b) each self-contained luminaire and/or internally illuminated sign shall be tested for its full duration; (c) at the end of the test period the supply to the normal lighting shall be restored and any indicator lamp or device checked to ensure that it is showing that the normal supply has been restored, (d) each central battery system shall be tested for its full duration. (e) at the end of the test period the supply to the normal lighting shall be restored and any indicator lamp or device checked to ensure that it is showing that the normal supply has been restored, The charging arrangements shall be checked for proper functioning; (f) each generator back-up battery, where fitted, shall be tested for its full duration, (g) at the end of the test period the system shall be restored to normal operation and the charging arrangements for the back-up and engine-starting batteries checked for proper functioning. Any indicator lamp or device shall then be checked to ensure that it is showing that normal arrangements have been restored; (h) The fuel tanks shall be left filled and the oil and coolant levels topped up as necessary. Those conducting the annual test should supply a Periodic Inspection and Testing Certificate Automatic Systems for Battery Powered Emergency Escape Lighting must be tested for full rated duration according to the manufacturers instructions

ITEM	SI/CODE/STANDARD	SUMMARY OF INSEPCTION REQUIREMENTS
Gas installations	• I.S. 820:2000 Non Domestic Gas Installations • The Energy (Miscellaneous Provisions) Act, 2006	I.S. 820:2000 states that appliances shall be serviced at intervals indicated in the manufacturer's instructions or at more frequent intervals if dictated by the conditions of use and in general at minimum intervals of one year.
Stored pressure water & Foam type fire extinguishers	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • I.S. 291:2002 - The Use, Siting, Inspection and Maintenance of Portable Fire Extinguishers	All stored pressure water and foam type extinguishers shall be subject to the following inspection annually: (a) Examination of the seal to ensure it is intact (b) The pressure gauge indication or reading should be observed to ensure it reads within the operating range marked on the extinguisher label. (c) The weight of extinguisher should be noted and compared to suppliers/manufacturers data (d) The body of the extinguisher shall be examined externally for signs of corrosion/damage. (e) Cleaning of the discharge nozzle and examination of discharge hose and replacement if necessary. (f) Record any points noted in maintenance/service register. A **third** of stored pressure water extinguishers should be subject to further examination annually, this examination is also required if the results of examination above reveal; (a) The extinguisher gauge does not read correctly or if pressure indicated differs by more than 10% from the recommended pressure marked on label. If the gauge is subsequently found to be defective it shall be replaced (b) If the difference in mass is more than 10% of the mass of the charge. This examination for a third of **stored pressure water extinguishers** should involve: (a) Discharge of the extinguisher (b) Opening of the extinguisher (c) Residual Charge – any liquid in the extinguisher should be discarded and internal body washed out. (d) Examination of extinguisher body components (e) Replacement of Charge

ITEM	SI/CODE/STANDARD	SUMMARY OF INSEPCTION REQUIREMENTS
		(f) Reassembling and Sealing (g) Maintenance undertaken should be recorded on service label This examination for a third of **stored pressure foam extinguishers** should involve: (a) Discharge of the extinguisher (b) Opening of the extinguisher (c) Examination of Residual Charge (d) Examination of extinguisher body components (e) Reassembling and Sealing Maintenance undertaken should be recorded on service label attached to extinguisher and in the maintenance service register – the date and signature of operator should be included on both and particulars of any replacements made and lack of compliance with EN-3.
Cartridge type water fire extinguishers		All cartridge type water and foam type extinguishers shall be subject to the following inspection annually: (a) Examination of the seal to ensure it is intact and opening extinguisher (b) Examination of Charge (c) Examination OF Extinguisher body and Components. (d) Replacement of Charge (e) Reassembling and Sealing (f) Maintenance undertaken should be recorded on service label attached to extinguisher and in the maintenance service register – the date and signature of operator should be included on both and particulars of any replacements made and lack of compliance with EN-3. (g) In addition at least **one fifth** of the extinguishers should be completely discharged.
Cartridge type foam fire extinguishers		All cartridge foam type extinguishers shall be subject to the following inspection annually: (a) Opening of Extinguisher: (b) Examination of Charge: (c) Examination of Extinguisher body and Components In addition at least one fifth of the extinguishers should be completely discharged.

ITEM	SI/CODE/STANDARD	SUMMARY OF INSEPCTION REQUIREMENTS
Powder type extinguishers fire extinguishers		**<u>Stored Pressure Powder Type Extinguishers</u>** At annual intervals all of the extinguishers shall be subjected to the following examination: (a) The seal shall be examined to see if it is intact (b) The pressure gauge indication or reading shall be observed to see if it lies within the operating range marked on the extinguisher label. (c) The extinguisher shall be weighed and its mass compared with the supplier's/manufacturer's data. (d) The body of the extinguisher shall be examined externally for signs of corrosion or damage. (e) The discharge nozzle and discharge hose shall be examined (f) The discharge hose shall be examined for signs of deterioration and replaced if necessary. (g) A record shall be made in the maintenance/service register of any points noted in this examination. A **fifth** of stored pressure powder type extinguishers on premises should be subject to further examination annually, this examination is also required if the results of examination above reveal; • The extinguisher gauge does not read correctly, or if the indicated pressure differs by more than 10% from the recommended pressure marked on the extinguisher label. • The difference in mass is more than 10% of the mass of the charge. • Traces of powder are found to be present. This examination should involve: (a) Discharge of extinguisher (b) Opening of extinguisher (c) Residual charge (d) Examination of extinguisher body and components (e) Replacement of charge (f) Reassembling and sealing

ITEM	SI/CODE/STANDARD	SUMMARY OF INSEPCTION REQUIREMENTS
		(g) Recording of maintenance **<u>Cartridge Type powder extinguishers</u>** Maintenance of cartridge type powder extinguisher consists of an annual examination of the extinguisher in accordance with requirements below: (1) Opening of extinguisher (2) Examination of charge (3) Examination of extinguisher body and components (4) Replacement of charge (5) Reassembling and Sealing (6) Recording of maintenance At least one fifth of the extinguishers shall be completely discharged by actuation of the discharge control device. Within a five-year period all shall have been test discharged in this manner.
Carbon dioxide type fire extinguishers		At annual intervals all of the extinguishers shall be subjected to the examination below: (a) The seal shall be examined to see if it is intact (b) The extinguisher complete with all its fittings shall be weighed and its mass compared with that marked on the label by the supplier. (c) The body of the extinguisher shall be examined externally for signs of corrosion or damage. (d) The discharge nozzle, horn, and hose, if fitted, and sealing washers shall be examined (e) A record of the examination shall be made on the record label. A **fifth** of stored pressure powder type extinguishers on premises should be subject to further examination annually, this examination is also required for extinguishers which has not been pressure tested within the previous 10 years and any previously pressure tested but not re-tested within the previous 5 years and the results of examination above reveal; • The difference in weight is more than 10% of the mass of the charge. • Corrosion with pitting be found or mechanical damage likely to reduce the strength of the body

ITEM	SI/CODE/STANDARD	SUMMARY OF INSEPCTION REQUIREMENTS
		This examination should entail: (a) Discharge of extinguishers (b) Recharging (c) Recording of maintenance
Automatic door releases	• BS 7273-4:2007 Code of practice for the operation of fire protection measures – Part 4: Actuation of release mechanisms for doors (although this is a British Standard it was the only applicable one that could be located)	It is recommended that the following work be carried out **every year**. (a) The switch mechanism of every manual release control necessary for compliance should be tested (b) All primary (non-rechargeable) batteries that are required to provide power for the correct operation of equipment must be replaced. (c) A visual inspection should be made to confirm that all readily accessible cable fixings are secure and undamaged. (d) All further annual checks and tests recommended by the manufacturer of the release mechanisms and associated equipment should be carried out.
Fire mains (dry and wet riser)	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • BS 9999:2008 Code of practice for fire safety in the design, management and use of building • BS 9990:2006 Code of practice for non-automatic fire-fighting systems in building	This standard also recommends annual checks but does not specify content or responsible party. In addition, it is recommended that wet tests be carried out annually when the main can be checked for leaks.
Sprinkler systems	• IS EN 12845:2004.+ A2:2009 Fixed firefighting systems : automatic sprinkler systems : design, installation and maintenance. • Safety, Health and Welfare at Work (General Application) Regulations, 2007	The following checks and inspection shall be made at intervals of no more than 12 months. (a) Automatic pump flow test (b) Diesel engine failed-to-start test (c) Float valves on water storage tanks (d) Pump suction chambers and strainers

ITEM	SI/CODE/STANDARD	SUMMARY OF INSEPCTION REQUIREMENTS
Smoke control systems	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • EN 12101 "Smoke and heat control systems" • BS 9999:2008 Code of practice for fire safety in the design, management and use of buildings	In BS 9999 **Annual** test also recommended although not described; It is specified that spring-operated fire dampers should be tested **annually** and fire dampers situated in dust-laden and similar atmospheres should be tested much more frequently, at periods suited to the degree of pollution.
Fire hose reels	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • IS EN 671-3:2009 Fixed firefighting systems: hose systems maintenance of hose reels with semi-rigid hose and hose systems with lay-flat hose**.**	During this inspection the hose should be fully run out, put under pressure and the following points checked: (a) The appliance is unobstructed and free from damage and components not corroded or leaking; (b) Operating instructions are clear and legible; (c) The location is clearly marked; (d) Brackets for wall mounting are suitable for their purpose and are fixed and firm; (e) The flow of water is steady and sufficient (f) Pressure gauge (if fitted) is working satisfactorily and within its operating range; (g) The entire length of hose should be inspected for signs of cracking, distortion, wear or damage. (h) Hose clips or bindings are of the correct type and are securely fastened; (i) Hose drums rotates freely in both directions; (j) For swinging reels, check that the pivot rotates easily and that the reel swings through 180°; (k) On manual reels, check the stop valve is of correct type and that it operates easily and correctly; (l) On automatic reels, check the correct operation of the automatic valve and check for the correct operation of the isolating service valve; (m) Check the condition of the water supply pipework, particular attention should be paid to any flexible pipework for signs of damage or wear; (n) If fitted with a cabinet, check for signs of damage and check that the cabinet doors open freely; (o) Check that the nozzle is of the correct type and easy to operate; (p) Check the operation of any hose guide and ensure they are correctly and firmly fixed;

ITEM	SI/CODE/STANDARD	SUMMARY OF INSEPCTION REQUIREMENTS
		(q) Leave the hose reel and hose system ready for immediate use. If any extensive maintenance is necessary the hose reel or hose system should be labeled OUT OF ORDER and the competent person should inform the user/owner.
X-Ray units	• Radiological Protection Act, 1991 (General Control of Radioactive Substances, Nuclear Devices and Irradiating Apparatus) Order, 1993 • Radiological Protection Act, 1991 (Ionising Radiation) Order, 2000 (SINo. 125 of 2000)	Users of X-ray units which are licensed by the RPII must abide by the licence conditions attached to their Licence and to relevant radiation protection legislation (Radiological Protection Act, Ionising Radiation Order, 2000 (SI 125 of 2000)). One licence condition states that "the licensed item shall be checked for correct operation and shall be serviced and maintained at **least every 12 months** or more frequently, depending on use, by suitably trained and competent persons in accordance with the manufacturer's instructions." This ensures that the unit is serviced and maintained on a regular basis.
Dental X-ray equipment	• Code of Practice for Radiological Protection in Dentistry - RPII - 96/2 • Radiological Protection Act, 1991 (General Control of Radioactive Substances, Nuclear Devices and Irradiating Apparatus) Order, 1993	Maintained, serviced and performance checked by competent person.
Goalposts	• I.S. 357:2007 playing field Equipment – Goals. Code of Practice on the Procurement, Installation, Maintenance Inspection and Storage.	This inspection is carried out to establish the overall level of safety of goals. • Should include routine visual inspection and operational inspection described above and • Foundations and surfaces, e.g. effects of weather, evidence of rotting or corrosion, Competent persons should carry out this inspection of the goal in strict accordance with manufacturer's instructions. The level of competence required will vary with the task.

14 MONTHS

ITEM	SI/CODE/STANDARD	SUMMARY OF INSEPCTION REQUIREMENTS
14 MONTHS		
Steam boilers	• Factories Act, 1955: Section 40 (amended by Safety in industry Act, 1980)**.** • The Factories (Preparation of Steam Boilers for Examination) Regulations, 1956 • Factories (Report of Examination of Steam Boilers) Regulations (amended by SI 359/79).	Section 40 of The Factories Act states every steam boiler and all its fittings and attachments shall be thoroughly examined by a competent person at least once in every period of **fourteen months,** and also after any extensive repairs. Any examination should consist of an internal and external examination of the boiler when it is cold, and, except in the case of an economiser or super heater, of an examination when it is under normal steam pressure.

2 YEARS

ITEM	SI/CODE/STANDARD	SUMMARY OF INSPECTION REQUIREMENTS
2 YEARS		
Dental X-ray equipment	• Code of Practice for Radiological Protection in Dentistry - RPII - 96/2 • Radiological Protection Act, 1991 (General Control of Radioactive Substances, Nuclear Devices and Irradiating Apparatus) Order, 1993	A full Quality Assurance inspection to insure compliance with requirements of the code (Detailed in the code in Appendix 2 - Criteria for the Acceptability of X-Ray Equipment in Dentistry) as well as an assessment of electrical and mechanical safety shall be carried out on all new equipment, and **every two years** thereafter, by a competent expert. The expert shall be independent of the supplying company. The frequency of inspection may be altered with expert advice. Particular attention shall be paid to old equipment.
Ventilation & air conditioning ductwork	• **BS 9999:2008**: **Code of practice for fire safety in the design, management and use of buildings**	Arrangements should be made for all fire dampers to be tested by a competent person on completion of the installation and at **regular intervals not exceeding 2 years**, and to be repaired or replaced immediately if found to be faulty.

26 MONTHS

ITEM	SI/CODE/STANDARD	SUMMARY OF INSEPCTION REQUIREMENTS
26 MONTHS		
Steam receivers	• Factories Act 1955, Section 41 (amended slightly by Safety in Industry, Act: section 32) • Factories (Report of Examination of Steam Receivers) Regulations 1956 (Amended by SI 356/ 1978)	Inspection should include examination of: • Maximum pressure of steam at source of supply to receiver • Condition of receiver • Construction – can it safely withstand maximum pressure of steam • Fittings and appliance • Safe working pressure
Air receivers	• Factories Act 1955, Section 42 (amended slightly by Safety In Industry Act, 1980, Section 33) • Factories (Report of Examination of Air Receivers) Regulations 1956	Inspection should include examination of: • Condition of receiver • Fittings and appliance • Safe working pressure

3 YEARS

ITEM	SI/CODE/STANDARD	SUMMARY OF INSEPCTION REQUIREMENTS
3 YEARS		
Sprinkler systems	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • IS EN 12845:2004. + A2:2009 - Fixed firefighting systems: automatic sprinkler systems: design, installation and maintenance.	The following checks and inspections shall be made at intervals of no more than 3 years. (a) Storage and pressure tanks (b) Water supply stop valves, alarm and non-return valves

4 YEARS

ITEM	SI/CODE/STANDARD	SUMMARY OF INSEPCTION REQUIREMENTS
4 YEARS		
Emergency lighting	• I.S. 3217: 2008 Emergency Lighting	Light level tests shall be carried out to confirm illumination levels

5 YEARS

ITEM	SI/CODE/STANDARD	SUMMARY OF INSEPCTION REQUIREMENTS
5 YEARS		
Fire hose reels	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • IS EN 671-3:2009 Fixed firefighting systems: hose systems maintenance of hose reels with semi-rigid hose and hose systems with lay-flat hose.	Every 5 years all hoses should be pressurized to maximum working pressure. After inspection and necessary corrective measures hose reels and hose systems should be marked **CHECKED** and a permanent record of all inspections, checks and tests maintained.

10 YEARS

ITEM	SI/CODE/STANDARD	SUMMARY OF INSPECTION REQUIREMENTS
10 YEARS		
Sprinkler systems	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • IS EN 12845: 2004. Fixed firefighting systems: automatic sprinkler systems: design, installation and maintenance.	At no more than 10-year intervals, all storage tanks shall be cleaned and examined internally and the fabric attended to as necessary.

FOLLOW INSTALLERS/ MANUFACTURERS INSTRUCTIONS

ITEM	SI/CODE/STANDARD	SUMMARY OF INSPECTION REQUIREMENTS
FOLLOW INSTALLERS / MANUFACTURERS INSTRUCTIONS		
Passenger / goods lifts	• European Communities (Lifts) Regulations, 1998 • EC Directives 95/16/EC (Lifts Directive) • IS EN 13015:2001 Maintenance for lifts and escalators—Rules for maintenance instructions	**IS EN 13015:2001:** Refer to details of installer's instructions.
Work equipment (machinery)	• IS ENISO 12100:2010 - Safety of machinery: general principles for design: risk assessment and risk reduction	**e)** information for maintenance, such as 1) the nature and frequency of inspections for safety functions, 2) specification of the spare parts to be used when these can affect the health and safety of operators, 3) instructions relating to maintenance operations which require a definite technical knowledge or particular skills and hence need to be carried out exclusively by skilled persons (for example, maintenance staff, specialists), 4) instructions relating to maintenance actions (replacement of parts, etc.) which do not require specific skills and hence may be carried out by users (for example, operators), and 5) drawings and diagrams enabling maintenance personnel to carry out their task rationally (especially fault-finding tasks).
Forklifts	• Forklift Truck Operator Pre-Use Checks, The Health & Safety Authority	Advise maintenance as per manufacturer's instructions.

ITEM	SI/CODE/STANDARD	SUMMARY OF INSPECTION REQUIREMENTS
Smoke control systems	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • EN 12101 "Smoke and heat control systems" • BS 9999:2008 Code of practice for fire safety in the design, management and use of buildings	Advise maintenance as per manufacturers instructions.
Sprinkler systems	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • IS EN 12845:2004. Fixed firefighting systems : automatic sprinkler systems : design, installation and maintenance	The installer should provide a documented inspection and checking procedure for the system. This should include instruction on the action to be taken in respect of faults, operation of the system, with particular mention of the procedure for emergency manual starting of pumps, and details of the weekly routine.
Ladders	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • Guide to the Safety, Health and Welfare at Work (General Application) Regulations, 2007, Part 4: Work at Heights • Using Ladders Safely - Information Sheet, The Health and Safety Authority • BS EN 131-3: 2007 Ladders: Part 3- Users Instructions	**General Applications, 2007, Part 4:** You must inspect and maintain the ladder at regular intervals to ensure the equipment is in safe working condition. The time between inspections should be based on risk assessment and the **manufacturer's instructions.** BS EN 131-3: 2007 - Repairs and maintenance shall be carried out by a competent person and be in accordance with the **producer's instructions.**
Fire detection & alarm systems	• IS 3218:2009 Fire Detection and Alarm Systems for Buildings: System Design, Installation Servicing and Maintenance	Each detector shall be checked for correct operation in accordance with the **manufacturer's recommendations** (see note below on detectors); It is essential that routine tests are adequate to ensure that the requisite degree of sensitivity to fire is maintained, and the responsible persons should satisfy themselves on this point. If it is found that the sensitivity of detectors is adversely affected by harsh environmental conditions, then arrangements should be made to increase the frequency of the inspections. Any detectors which have shown continued signs of instability should be replaced. All detectors should be visually examined for damage or other conditions, such as any coating of paint, likely to interfere with correct operation.

ITEM	SI/CODE/STANDARD	SUMMARY OF INSPECTION REQUIREMENTS
Personal fall protection equipment	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • BS 8437:2005 Code of practice for selection, use and maintenance of personal fall protection systems and equipment for use in the workplace • BS EN 365:2004 Personal protective equipment against falls from a height — General requirements for instructions for use, maintenance, periodic examination, repair, marking and packaging • Inspecting fall arrest equipment made from webbing or rope, The Health and Safety Executive, UK	It is essential that all load-bearing equipment is given a visual and tactile inspection before each use to ensure that it is in a safe condition and operates correctly. Advice should be obtained from the manufacturer on how to do this, and this advice should be strictly followed. Manufacturers shall provide all the necessary information and equipment e.g. instructions, checklists, spare parts lists and special tools etc, to enable periodic examinations to be carried out by a competent person. BS EN 365:2004 - where deemed necessary by the **manufacturer,** e.g. due to the complexity or innovation of the equipment, or where safety critical knowledge is needed in the dismantling, reassembly, or assessment of the equipment, (e.g. a retractable type fall arrester), an instruction specifying that periodic examinations shall only be conducted by the manufacturer or by a person or organisation authorised by the manufacturer
Goalposts	• I.S. 357:2007 playing field Equipment – Goals. Code of Practice on the Procurement, Installation, Maintenance Inspection and Storage.	Goals should be maintained in accordance with manufacturer's instructions. Check that **manufacturer's instructions** are followed in relation to location of anchorage equipment and correct weights;
Vehicle lifting tables	• IS EN 1570:1998 + A2: 2009 – Safety requirements of lifting tables	The **manufacturer** shall supply with each lifting table a set of instructions sufficient to inspect, maintain and repair the lifting table including access methods and replacement periods of parts. These shall state that any replacement parts required for the lifting table shall be obtained from the original manufacturer of the lifting table or be of at least equivalent quality and safety.

ITEM	SI/CODE/STANDARD	SUMMARY OF INSPECTION REQUIREMENTS
Gas detection systems	• IS EN 50073:1999 Guide for selection, installation, use and maintenance of apparatus for detection and measurement of combustible gases or oxygen.	According to the standard a sequence of inspections may include the following: (a) Resetting of the mechanical zero of analogue meters. (b) Checking the tightness of all electrical connections (remote detector head, power supply etc.). (c) Allowing adequate warm-up time. (d) Checking for sample-line leaks and proper flow. (e) Checking for clogged or dirty flame-arresting systems. (f) Checking the battery voltage and/or battery condition (g) Performing a test of the failure (malfunction) circuit(s). Checking that a zero reading is displayed when operated in clean air and the response test, as follows and the response (sensitivity) of the apparatus should be checked using the field calibration kit. For alarm-only apparatus, a test gas concentration should be applied which is equal to 5 % LEL above the highest alarm set point of the apparatus.
Gas installations	• Requirements of IS 820:2010 Non Domestic Gas Installations	Under IS 820:2010, it states that appliances shall be serviced at intervals indicated in the **manufacturer's instructions** or at more **frequent intervals** if dictated by the conditions of use and in general at minimum intervals of **one year**.
X-ray units	• Radiological Protection Act, 1991 (General Control of Radioactive Substances, Nuclear Devices and Irradiating Apparatus) Order, 1993	One licence condition states that "the licensed item shall be checked for correct operation and shall be serviced and maintained at **least every 12 months** or more frequently, depending on use, by suitably trained and competent persons in accordance with the **manufacturer's instructions**." This ensures that the unit is serviced and maintained on a regular basis.
Dental X-ray units	• Code of Practice for Radiological Protection in Dentistry - RPII - 96/2	Additionally, the instructions for use shall identify the parts on which preventive inspection and maintenance shall be performed by SERVICE PERSONNEL, including the periods to be applied, but not necessarily including details about the actual performance of such maintenance.

REGULAR INTERVALS (UNSPECIFIED)

ITEM	SI/CODE/STANDARD	SUMMARY OF INSPECTION REQUIREMENTS
REGULAR INTERVALS (UNSPECIFIED)		
Passenger/goods lifts **Including: Fire-fighting lifts**	• European Communities (Lifts) Regulations, 1998 to 2008 • EC Directives 95/16/EC (Lifts Directive) • IS EN 13015:2001 Maintenance for lifts and escalators— Rules for maintenance instructions	Installers instructions should include details on the need for the owner to carry out periodically a full ascent and descent which should include checks on: • Landing doors and bottom door tracks; • Stopping accuracy; • Indicators that are not located in a reserved area; • Landing push controls; • Car push controls; • Door open controls; • Two-way means of communication in the car which provides permanent contact with a rescue service; • Normal car lighting; • Door reversal device; • Safety signs/pictograms. For goods only and service lifts the checks to be carried out are the same, when relevant.
Ladders	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • Guide to the Safety, Health and Welfare at Work (General Application) Regulations, 2007, Part 4: Work at Heights • Using Ladders Safely - Information Sheet, The Health and Safety Authority • BS EN 131-3: 2007 Ladders: Part 3- Users Instructions	Regular visual checks should be made for damage such as cracked or bent stiles or rungs, corrosion and defective or missing fittings. You must inspect and maintain the ladder at regular intervals to ensure the equipment is in safe working condition. The time between inspections should be based on risk assessment and the manufacturer's instructions. A record of all maintenance and inspections carried out should be kept.
Goalposts	• I.S. 357:2007 playing field Equipment – Goals. Code of Practice on the Procurement, Installation, Maintenance Inspection and Storage.	Goals should be inspected **regularly** to ensure they are safe for use – frequency of inspections should take account of conditions in which goal is kept. The standard states it may be necessary to inspect a goal installed in a public space **everyday** but less frequent inspections would be required for goals in a locked, fenced enclosure, used only by an organised club at high level.

ITEM	SI/CODE/STANDARD	SUMMARY OF INSPECTION REQUIREMENTS
Personal fall protection equipment	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • BS 8437:2005 Code of practice for selection, use and maintenance of personal fall protection systems and equipment for use in the workplace • BS EN 365:2004 Personal protective equipment against falls from a height — General requirements for instructions for use, maintenance, periodic examination, repair, marking and packaging • Inspecting fall arrest equipment made from webbing or rope, The Health and Safety Executive, UK	It is recommended that interim inspections of personal fall protection equipment are carried out over and above the pre-use checks and the detailed inspections, at intervals determined by the risk assessment carried out at the beginning of the job. In determining what is a suitable interval, factors such as whether items are subject to high levels of wear and tear or contamination should be considered.
Earth loop impedance system	• ET101: 2006 National Rules for Electrical Installations	The fault loop impedance should be measured using a proprietary instrument with a facility for measuring low values of impedance. Measurements should be made as follows, • At the location of the main fuse the instrument is connected between the phase conductor and the main earthing terminal. • For a final circuit the instrument is connected at the furthest point of the circuit between the phase conductor and the corresponding point on the associated protective conductor e.g. at a socket outlet. And checked against details of Annex 61C of ET101.
Residual Current Devices (RCDS)	• ET101: 2006 National Rules for Electrical Installations • ET214: 2005 Guide to the Selection & Use of Residual Current Devices (RCDS) • ET 215: 2008 Guideline on Managing Safety in the Use of Portable Electrical Equipment in the Workplace: Section 3.6	ET214 recommends verifying operation of RCDS using the test button on the RCD at regular intervals such as every three months. The Code of Practice for Preventing Injury and Occupational Ill Health in Agriculture recommends RCD's be tested **monthly** by using the test trip button. ET214 also states arrangements should be made for regular testing by application of an external residual current as specified in Annex 61f of ET101. Annex 61f of ET101 deals with verification of operation of RCDS, and specifies that the operating characteristics of RCDS should be verified by injecting a test residual current and recording time of operation by means of an instrument specifically designed for the purpose. The values obtained should be in line with ET101 tables. These should be completed at regular intervals although no specific time frame mentioned.
Work equipment	• Safety, Health and Welfare at Work (General Application) Regulations, 1993.	In the case of work equipment which is exposed to conditions causing deterioration liable to result in a danger to safety or health periodic inspections and, where appropriate, testing should be carried out.

ITEM	SI/CODE/STANDARD	SUMMARY OF INSPECTION REQUIREMENTS
Fire hydrants	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • BS 9999:2008 Code of practice for fire safety in the design, management and use of buildings. • BS 9990:2006 Code of practice for non-automatic fire-fighting systems in buildings	Periodical inspections of the vicinity of all hydrants should also be made to ensure that there are no obstructions impeding accessibility and that hydrant indicator plates are in position. Periodical inspection should be made to ensure that all isolating valves for systems are kept locked in an open position. Also flow and pressure should be checked to ensure that supplies have not deteriorated. If possible the local authority or Chief Fire Officer should be consulted on any inspection schedules.
Fire hose reels	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • BS 5306-1:2006 Code of practice for fire extinguishing installations and equipment on premises – Part 1: Hose reels and foam inlets. • IS EN 671-3:2009 Fixed firefighting systems: hose systems maintenance of hose reels with semi-rigid hose and hose systems with lay-flat hose. • BS 9999:2008 Code of practice for fire safety in the design, management and use of buildings.	Checks should ensure that each hose reel or hose system is: • Located in the designated place, • Unobstructed, visible and has legible operating instructions, • Not obviously defective, corroded or leaking.
Gas installations	• I.S. 820:2000 Non Domestic Gas Installations • The Energy (Miscellaneous Provisions) Act, 2006	I.S. 820:2000 states that appliances shall be serviced at intervals indicated in the manufacturer's instructions or at more frequent intervals if dictated by the conditions of use and in general at minimum intervals of one year.
Smoke control systems **Specifically ventilation & air conditioning ductwork**	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • EN 12101 "Smoke and heat control systems" • BS 9999:2008 Code of practice for fire safety in the design, management and use of buildings	Arrangements should be made for all fire dampers to be tested by a competent person on completion of the installation and at **regular intervals not exceeding 2 years**, and to be repaired or replaced immediately if found to be faulty. Arrangements should be made for periodic maintenance of any smoke detector system used to operate fire dampers and for such system(s) to be tested by a competent person after installation to determine whether detection occurs at the appropriate design smoke density. Any smoke detector system that is found to be faulty should be either repaired or replaced immediately.

PRIOR TO USE

ITEM	SI/CODE/STANDARD	SUMMARY OF INSPECTION REQUIREMENTS
PRIOR TO USE		
Ladders	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • Guide to the Safety, Health and Welfare at Work (General Application) Regulations, 2007, Part 4: Work at Heights • Using Ladders Safely - Information Sheet, The Health and Safety Authority • BS EN 131-3: 2007 Ladders: Part 3- Users Instructions	Before using the ladder you must visually check it at least daily. The inspection should pick up obvious defects such as: • cracked or bent stiles or rungs; • corrosion; • defective or missing fittings or ties.
Personal fall protection equipment	• Safety, Health and Welfare at Work (General Application) Regulations, 2007 • IS EN 365:2004/AC:2006 Personal protective equipment against falls from a height — General requirements for instructions for use, maintenance, periodic examination, repair, marking and packaging • IS EN 363:2008 Personal fall Protection Equipment – Personal Fall Protection Systems • BS 8437:2005 Code of practice for selection, use and maintenance of personal fall protection systems and equipment for use in the workplace • Inspecting fall arrest equipment made from webbing or rope, The Health and Safety Executive, UK	It is essential that all load-bearing equipment is given a visual and tactile inspection before each use to ensure that it is in a safe condition and operates correctly. Advice should be obtained from the manufacturer on how to do this, and this advice should be strictly followed. Pre-use checks for laynards should be tactile and visual. The whole lanyard should be subject to the check, by passing it slowly through the hands (e.g. to detect small cuts of 1 mm in the edges, softening or hardening of fibres, ingress of contaminants). A visual check should be undertaken in good light and will normally take a few minutes.
Forklift	• Health and Safety Authority - Forklift Truck Operator Pre-Use Checks available on www.hsa.ie	Daily checks of tyres, brakes, reversing alarm, flashing beacon, etc. by the driver prior to use.
Goalposts	• I.S. 357:2007 playing field Equipment – Goals. Code of Practice on the Procurement, Installation, Maintenance Inspection and Storage.	Goals should be inspected regularly to ensure they are safe for use – frequency of inspections should take account of conditions in which goal is kept. Level of usage should also be considered when developing inspection schedule.

NOTE:
Electric Power Generators are covered under requirements outlined in IS 3217:2008 Emergency Lighting and IS 3218:2009 Fire Detection and Alarm Systems for Buildings: System Design, Installation and Servicing and manufactures instructions should also be followed.
For **Break Glass Units** see requirements for manual call points as covered in Code of practice on Fire Alarm and Detection Systems above.

APPENDIX 1

Safety Health and Welfare at Work (General Application) Regulations, 2007

Schedule 1

Part E — Information to be contained in report of thorough examination

And

Regulation 54

Keeping of records and registers of lifting equipment

Schedule 1

Part E — Information to be contained in report of thorough examination

1. The name and address of the employer or owner for whom the thorough examination was made.

2 The address of the premises at which the thorough examination was made.

3. Particulars sufficient to identify the lifting equipment including, where known, its date of manufacture.

4. Date of this examination and date of the last thorough examination if known.

5. The safe working load of the lifting equipment or, where its safe working load depends on the configuration of the lifting equipment, its safe working load for the different configurations that have been determined.

6. The purpose of the examination including examination before putting into use for the first time, examination after installation or after assembly at a new site or in a new location, examination after repairs or alterations and periodic examination.

7. In relation to every thorough examination of lifting equipment—

(a) Identification of any part found to have a defect which is or could become a danger to persons and a description of the defect;
(b) Particulars of any repair, renewal or alteration required to remedy a defect found to be a danger to persons;
(c) In the case of a defect which is not yet but could become a danger to persons

(i) The time by which it could become such danger;
(ii) Particulars of any repair, renewal or alteration required to modify it;

(d) The latest date by which the next thorough examination must be carried out;
(e) Where the thorough examination included testing, particulars of any test;
(f) Identification of parts not accessible for examination.

8. The name, address and qualifications of the individual making the report and, where appropriate, the name and address of the individual's employer.

9. Where appropriate, the name and position of a person signing or authenticating the report on behalf of its author.

Safety Health and Welfare at Work (General Application) Regulations, 2007, Regulation 54 - Keeping of records and registers of lifting equipment.

(1) An employer shall ensure that a report, under Regulation 53, or a copy of it—

(a) is kept at the place of work when the lifting equipment is permanently located there,
(b) in the case of lifting equipment on a construction site, is kept at the site office or at the business address of the contractor for whom the report was made,
(c) and in the case of mobile equipment, is kept on the equipment in addition to being available for inspection at the address of the equipment owner.

(2) An employer shall ensure that—

(a) A register of lifting equipment and lifting accessories containing details of the equipment, distinguishing number, date of first use and date of last thorough examination and testing is maintained and kept available for inspection by an inspector, and
(b) if the equipment does not have a distinguishing number or mark, one of long lasting duration is provided.

Appendix 2: Summary of reference documents added in this update

Equipment type	Relevant update
FIRE	
Fire hydrants	No change
Fire extinguishers	BS 5306-3:2009: Commissioning and maintenance of portable fire extinguishers
Fire hose reels	IS EN 671-3: 2009 supersedes 2000 – Fixed fire fighting systems: hose systems maintenance of hose reels with semi rigid hose
Sprinkler systems	IS EN 12845:2004 + A2: 2009 Fixed fire fighting systems: Automatic sprinkler systems; Design, installation & maintenance
Fire detection & alarm systems	Changed to incorporate Break Glass Units / Call point
Break glass units	See above
Fire mains (Wet & Dry risers)	No change
Fire doors	IS EN 179:2008: Building Hardware – Emergency exit devices operated by lever handle or push pad, for use on escape routes – requirements and test methods
Emergency lighting	No change
Automatic door releases	No change
Gas installations	I.S. 820:2010 Non domestic gas installations:
Gas detection systems	No change
Smoke control systems	No change
ELECTRICAL	
Electric power generators:	Ref to SHWW '07 Reg 89 – Electrical testing & inspection
Residual current devices (RCDs):	ET215:2008 Guideline on managing safety in use of portable electrical equipment in the workplace
Earth loop impedance system	No change

Equipment type	Relevant update
LIFTING EQUIPMENT / WORKING AT HEIGHT	
Passenger/Goods lift:	European Communities (Lifts) (Amendment) Regulations 2008
	I.S. EN 115-2:2010: Safety of Escalators and moving walks – Part 2: Rules for the improvement of safety of existing escalators and moving walks
Hoist/Mobile Elevating Work Platform:	No change
Ladders:	**BS EN 131-2:2010** Ladders: Part 2 – Requirements, testing, marking
	INDG 402: Safe use of ladders and stepladders – An employers' guide: Health & Safety Executive (HSE)
	Ladders: Pre use checks: things to look for:Health & Safety Executive (HSE) 2010
Personal Fall Protection Equipment:	**ISEN 363:08** – Personal Fall Protection Equipment
	EN 365:2004/AC: 2006 Personal protective equipment against falls from a height — General requirements for instructions for use, maintenance, periodic examination, repair, marking and packaging.
Forklifts	http://www.hsa.ie/eng/Publications_and_Forms/Publications/Work_Related_Vehicles/Forklift **Truck Operator Poster.pdf**
Lifting accessories/lifting equipment:	Reference to Reg. 52 SHWW 2007
Vehicle Lifting Tables:	IS EN 1570:1998 + A2: 2009 – Safety requirements of lifting tables – provides information for use and safety checks on installation of a lifting table
MISCELLANEOUS	
Steam Boilers	Factories (Report of Examination of Steam Boilers) Regulations (amended by SI 359/78).
Steam receivers	No change
Air receivers	No change
Work equipment	**IS ENISO 12100:2010:** Safety of machinery: general principles for design: risk assessment, risk reduction
	SI 407/08: European Communities (Machinery) Regulations 2008
X-ray units	**IS EN 60601-1-3:2008**: Medical Electrical equipment – Part 1-3: General requirements for basic safety and essential performance incl. 6060-1-3:2008 (EQV) Collateral Standard: radiation protection in diagnostic x-ray equipment
Dental x-ray units:	**IS EN 60601-1:2005** Medical Electrical equipment general requirements for basic safety and essential performance
Goalposts	No change