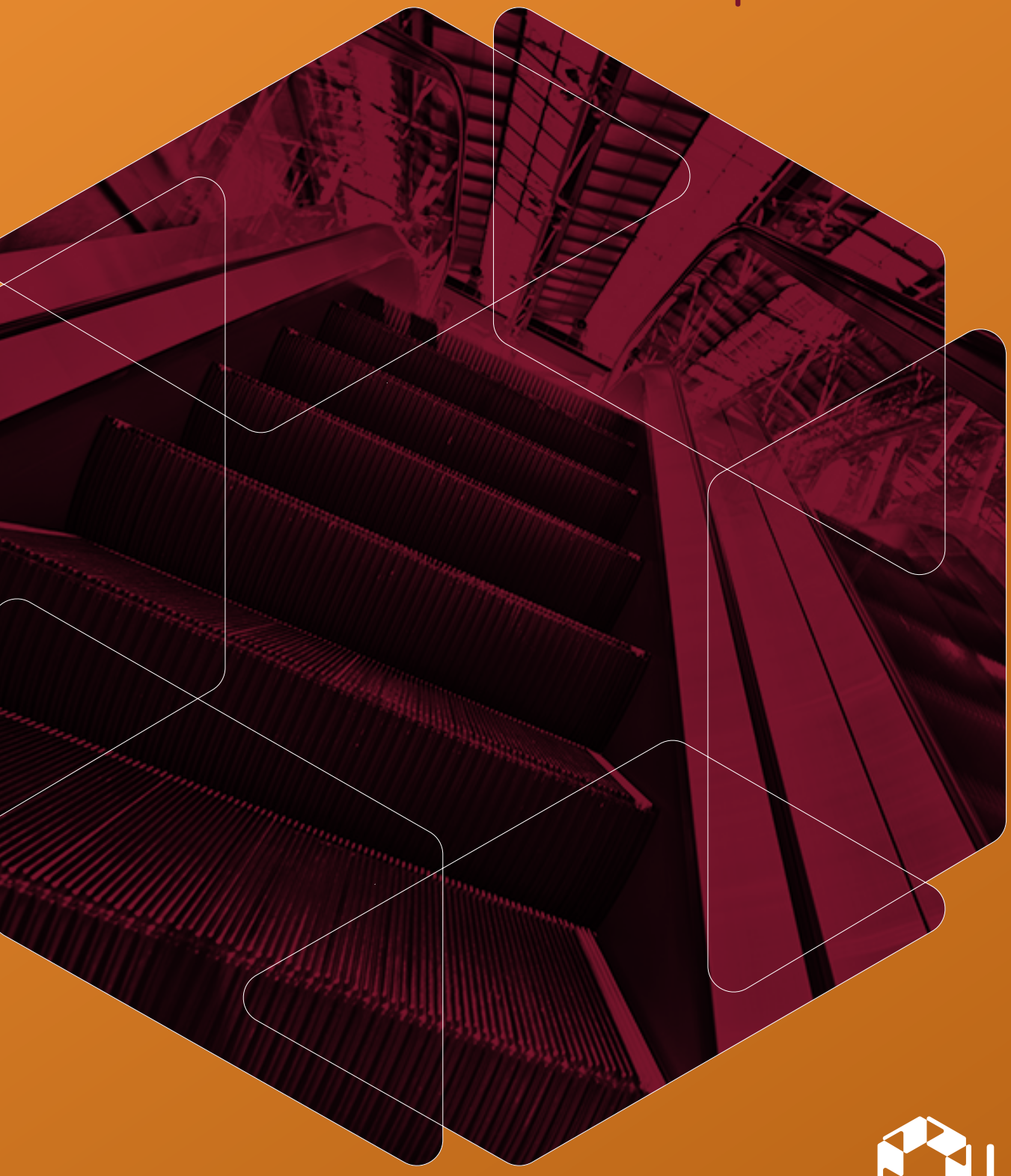
ST0252

LEVEL 3

Lift & Escalator Engineering

End-Point Assessment Specification



Version 1.2 April 2025

LEIA ASSESSMENT

About the Apprenticeship Standard

Apprenticeship Standard	Lift & Escalator Engineering
Standard code (ST0xxx)	ST0252
Level	3
Date apprenticeship standard approved for delivery	01/04/2025
Date apprenticeship standard scheduled for review	01/04/2028
Typical Duration of apprenticeship (excluding EPA)	12-36 months
Pre-entry requirements for apprenticeship	For individual employers to decide

Knowledge, skills and behaviours

The knowledge, skills and behaviours of the apprenticeship standard that must be learnt during the apprenticeship prior to End-Point Assessment.

Gateway to end-point assessment (pre-entry requirements to end-point assessment)	
Mandated qualifications during apprenticeship	None
Minimum time in learning prior to undertaking end-point assessment	12 months
Maths (level)	16-18 L2 19+ Not mandatory
English (level)	16-18 L2 19+ Not mandatory
Any other gateway requirements.	Portfolio of Evidence
The process for Reasonable adjustments	Application at least 3 months prior to EPA via Reasonable Adjustments and Special Considerations Policy (EPA21)

End-point Assessment (EPA)

EPA		
Name of end-point assessment organisation		LEIA
End-point organisation code		EPA0269
About LEIA		Trade association for the Lift and Escalator industry
Contracting, planning and scheduling end-point assessment		Email epa@leia.co.uk
Duration of EPA		4 months
Assessment Plan version number that LEIA is operating to		Version 1.2
Objective of the end-point assessment		To complete the apprenticeship
End-point assessment methods	**Assessment method 1:**	Multiple choice questions (MCQ) test
	Assessment method 2:	Practical Assessment with questioning
	Assessment method 3:	Interview underpinned by a portfolio of evidence.
Language of the end-point assessment		All components of the EPA will be conducted in English. The apprentice may be assessed in British Sign Language where it is permitted for the purpose of reasonable adjustment.
Mock materials provided		Knowledge Test / Interview questions

End-point Assessment method 1 – MCQ Test	
KSBs to be assessed	See assessment plan
Duration	60 minutes
Delivery methods (face to face / remote)	Face to face / remote
Location	To be decided per apprentice
Equipment or resources required	Computer
Assessor apprentice ratio	10:1 face to face, 1:1 remote
Number of questions (if applicable)	30
Grading	Fail, Pass, Distinction

End-point Assessment (EPA) (cont.)

Multiple choice test	
Core KSB	**KSB Detail**
K1	Awareness of health and safety regulations, standards, codes of practice and industry guidance, relevance to the occupation and their responsibilities: Health and Safety at Work Act, Control of asbestos regulations, Lifting Operations and Lifting Equipment Regulations (LOLER), Provision and Use of Work Equipment Regulations (PUWER), Control of Substances Hazardous to Health (COSHH), Electricity at Work Regulations, Control of Noise at Work Regulations, Construction Design Management (CDM) Regulations, Building Safety Act and secondary legislation, evacuation, first aid, barriers, guards and signage, safe isolation, near miss reporting, types of fire extinguishers, Personal Protective Equipment (PPE) and working at height regulations.
K2	Environmental and sustainability regulations and guidance, relevance to the occupation and their responsibilities. Environmental hazards that can arise from lift and escalator maintenance and installation operations. Environmental management systems standard. Waste management regulations. Types of pollution and control measures: noise, smells, spills, and waste. Waste Electrical and Electronic Equipment Directive (WEEE). Hazardous waste regulations.
K9	Mechanical forces present. How to safely contain and secure.
K10	Mechanical principles: SI units for mechanical measurements, impact on materials and the modes of failure in engineering systems, mechanical, fluid power transmission systems. The effects of static and dynamic loading.
K11	Electrical principles: SI units for electrical measurements: three phase and single-phase distribution systems, properties and applications of conductors and insulators, AC and DC theory covering voltage, current, resistance and capacitance, magnetism and the function of electromagnets, AC and DC motors.
K23	Information technology and digital requirements: digital interfaces, email, Management Information Systems (MIS), virtual communication, learning platforms, work collaboration platforms, General Data Protection Regulation (GDPR), cyber security, technological development, and innovation in the engineering sector.
K24	The lift, escalator and moving walks industry: types of organisations, types of products, supply chain. Customers and their requirements, impacts on product demand, different teams and functions involved in operations.

End-point Assessment (EPA) (cont.)

Multiple choice test – Option 1: Lift installation	
Core KSB	**KSB Detail**
K30	The Lift Regulations, BS EN 81 series and BS 8486: relevance of regulations.
K36	Hydraulic equipment installation requirements: pipework, cylinders, safety components, valves, pumps, and tanks.
Multiple choice test – Option 2: Escalator or moving walk installation	
K41	The Supply of Machinery (Safety) Regulations, BSEN 115 series and BS 5656: relevance of regulations.
Multiple choice test – Option 3: Lift maintenance and repair	
K49	The Lift Regulations, BS EN 81 series: relevance of regulations.
K54	Hydraulic principles and the movement of masses: fluids, pumps, valve blocks, pistons, and pipework.
Multiple choice test – Option 4: Escalator or moving walk maintenance and repair	
K60	The Supply of Machinery (Safety) Regulations, BSEN 115 series and BS 5656: relevance of regulations.

Practical Assessment with questioning	
Core KSB	**KSB Detail**
K3	Method statements, risk assessments and types of hazards.
K5	Fire safety measures include correct operation of electrical fault, overload and over temperature protection, and control of combustible materials.
K13	Analogue and digital control systems. Operation, installation and maintenance.
K14	Standards and regulations relating to meeting the needs of vulnerable people: access, evacuation, fire and emergency use, relevance to the occupation and their responsibilities.
K20	Documentation: methods and requirements - electronic and paper.
K25	Work area: set up, maintenance and restoring.
S1	Comply with health and safety regulations, standards and industry guidance, for example method statements and risk assessments.
S5	Apply principles and techniques to access digital and analogue control and drive systems.

End-point Assessment (EPA) (cont.)

Practical Assessment with questioning (cont.)	
Core KSB	**KSB Detail**
S10	Comply with information contained in site notices and instructions.
S11	Prepare, maintain and restore the work area on completion of the activity.
S12	Record and enter information - paper based or electronic. For example, job sheets, risk assessments, equipment maintenance records, test results, handover documents, on-site checklists, waste environmental records and any legal reporting requirements.
B1	Put health and safety first for themselves and others.
Option 1: Lift Installation	
K29	Manufacturer's guidelines and British Standard (BS)BS 7255 code of practice for safe working on lifts: relevance of standard, refuge spaces in lift machinery areas and lift wells.
K37	Principles and procedures of putting lifts into service and confirming correct operation of lift systems and components.
K38	Principles and procedures of taking lifts out of service for access.
S17	Apply the required procedures when working in a traction lift environment.
S22	Appy procedures to put the lift into service and confirm correct operation associated with lift systems.
S23	Comply with procedures to access and egress to lift pit and top of car spaces.
S24	Apply procedures to take the lift out of service in preparation for access.
Option 2 - Escalator or moving walk installation	
K40	Manufacture's guidelines and British Safety Standard BS 7801 code of practice for safe working on escalators and moving walks: relevance of standard.
K45	Principles and procedures of putting escalator or moving walks into service and confirming correct operation of escalator or moving walk installations and components.
K46	Principles and procedures of taking escalators or moving walks out of service for access.
K47	Principles and procedures of accessing and egressing escalators or moving walks bottom return spaces.
S25	Apply the required procedures when working in an escalator or moving walk environment.
S28	Apply procedures to put the escalator or moving walk into service and confirm correct operation associated with escalator or moving walk systems.
S29	Apply procedures to take the escalator or moving walk out of service in preparation for access.
S30	Comply with procedures to access and egress escalator or moving walks bottom return spaces.

End-point Assessment (EPA) (cont.)

Option 3: Lift maintenance and repair	
Core KSB	KSB Detail
K48	Manufacture's guidelines and British Standard (BS)BS 7255 code of practice for safe working on lifts: relevance of standard, refuge spaces in lift machinery areas and lift wells.
K56	Principles and procedures of taking lifts out of service for access.
K57	Principles and procedures of accessing and egressing lift pit and top of car spaces.
K58	Principles and procedures of putting lifts into service and confirming correct operation of lift systems and components.
S31	Apply the required procedures when working in A traction lift environment.
S37	Apply procedures to take the lift out of service in preparation for access.
S38	Appy procedures to put the lift into service and confirm correct operation associated with lift systems.
S39	Comply with procedures to access and egress lift pit and top of car spaces.
Option 4: Escalator or moving walk maintenance and repair.	
K59	Manufacturer's guidelines and British Safety Standard BS 7801 code of practice for safe working on escalators and moving walks: relevance of standard.
K67	Principles and procedures of taking escalators or moving walks out of service for access.
K68	Principles and procedures of accessing and egressing escalators or moving walks bottom return spaces.
K69	Principles and procedures of putting escalator or moving walks into service and confirming correct operation of escalator or moving walk installations and components.
S40	Apply the required procedures when working in an escalator or moving walk environment.
S45	Apply procedures to take the escalator or moving walk out of service in preparation for access.
S46	Comply with procedures to access and egress escalator or moving walks bottom return spaces.
S47	Apply procedures to put the escalator or moving walk into service and confirm correct operation associated with escalator or moving walk systems.

End-point Assessment (EPA) (cont.)

Interview underpinned by a portfolio	
Core KSB	KSB Detail
K4	Manufacturer manuals, general arrangement and construction drawings, electrical diagrams and mechanical drawings used in lift and escalator engineering.
K6	Business operation considerations include efficiency, customer satisfaction, competitiveness, minimizing risks to operation, ethical principles, making recommendations.
K7	Fault finding and diagnostic methods and techniques. Components and systems operation, and adjustment and replacement decisions.
K8	Principles of manual and mechanical handling: load management, lifting, handling, hoisting, and rigging methods.
K12	Tools, mechanical measuring devices and alignment equipment: function, use and calibration.
K15	Electrical measuring equipment and diagnostic tools: use and function.
K16	Principles for continued professional development (CPD) for maintaining and improving competence.
K17	Limits of own competence and where to seek help.
K18	How to plan the unloading and storage of materials.
K19	Verbal communication techniques. Giving and receiving information. Matching style to audience. Barriers in communication and how to overcome them. Engineering terminology.
K21	Non-verbal communication techniques: gestures, facial expressions, tone of voice, eye contact, body language.
K22	Equality Act. Equity, diversity, and inclusion in the workplace. Unconscious bias.
K26	Team working principles.
K27	Planning, prioritising and work and time management techniques.
K28	Continuous improvement tools and techniques: Lean, SixSigma, PDCA.
S2	Comply with environmental and sustainability regulations and organisational procedures for example, segregate resources for reuse, recycling, and disposal.
S3	Use tools, alignment equipment and measuring devices, completing calibration checks where required.
S4	Lift and handle systems and components using mechanical or manual methods.
S6	Fault find and diagnose issues using electrical measuring equipment such as multi-meters and electronic diagnostic tools.

End-point Assessment (EPA) (cont.)

Interview underpinned by a portfolio (cont.)	
Core KSB	**KSB Detail**
S7	Interpret and use engineering documentation such as electrical wiring diagrams, mechanical drawings, assembly drawings, construction drawings and general arrangement drawings.
S8	Identify, organise, and use resources to complete tasks, with consideration for cost, quality, safety, security, and environmental impact.
S9	Communicate with others verbally for example, colleagues and stakeholders.
S13	Follow equity, diversity, and inclusion procedures.
S14	Apply team working principles.
S15	Apply continuous improvement techniques. Devise suggestions for improvement.
S16	Carry out and record planned and unplanned learning and development activities.
B2	Act in a professional manner.
B3	Collaborate and promote teamwork across disciplines.
B4	Acts within limits of own competence and seeks assistance when necessary.
B5	Acts within limits of own competence and seeks assistance.
B6	Take personal responsibility for their own sustainable working practices.
B7	Supportive of the needs and concerns of others, for example relating to diversity and inclusion.
Option 1: Lift Installation	
K31	Load bearing components in lift installations.
K32	Principles of measuring and setting out lift equipment.
K33	Lift doors and entrances: requirements for alignment, operation and installation including resisting the spread of fire.
K34	Means of suspension, and construction and termination requirements.
K35	Buffer and safety gear systems, types, construction and operational requirements.
S18	Apply techniques and principles of measuring and setting out lift equipment.
S19	Carry out installation of lift suspension systems.
S20	Carry out installation of lift machines, overspeed protection devices and control systems.
S21	Carry out installation of lift doors, entrances, and associated equipment.

End-point Assessment (EPA) (cont.)

Option 2: Escalator or moving walk installation.	
Core KSB	KSB Detail
K42	Load bearing components in an escalator or moving walk installation.
K43	Measurement, setting out and adjustment used in a whole installation.
K44	Step, pallet and skirting clearances.
S26	Carry out installation of escalator and moving walk equipment for example truss, steps, pallets, handrail, chains, step band and safety sensors.
S27	Apply techniques and principles of measuring and setting out escalator or moving walk equipment.
Option 3 - Lift maintenance and repair.	
K50	Load bearing components in a lift.
K51	Door and lock clearances and settings: maintenance of parts, part or whole lift door removal and the implications for resisting the spread of fire.
K52	Lubricants, hydraulic fluids, and cleaning substances.
K53	Maintenance requirements of suspension systems, correct over-run, termination requirements and discard criteria.
K55	Maintenance practices and techniques: planned, predictive and reactive methods, and their frequency.
S32	Check lift positioning systems are working to specification.
S33	Check, replace and set up lift door systems and clearances and check door closing protection.
S34	Check lift travel requirements such as the correct set up of lift travel over-runs.
S35	Inspect and verify the compliance of suspension systems. Determine when replacement is necessary.
S36	Conduct planned and reactive lift maintenance.
S20	Carry out installation of lift machines, overspeed protection devices and control systems.
S21	Carry out installation of lift doors, entrances, and associated equipment.

End-point Assessment (EPA) (cont.)

Option 4: Escalator or moving walk maintenance and repair.	
K61	Load bearing components making up an escalator or moving walk installation.
K62	Step and pallet clearances and discard criteria.
K63	Oil and lubricant types, cleaning substances and applications.
K64	Maintenance practices and techniques: planned, predictive and reactive methods, and their frequency.
K65	Principles and of checking and setting up safety systems.
K66	Principles of checking, adjusting and repairing tensioning systems.
S41	Carry out removal and replacement of escalator or moving walk parts for example steps, pallets, chains, handrails and adjust for optimal performance.
S42	Check and set up safety systems for example comb plates, handrail entry devices, step sag switches, step and pallet sensors and handrail sensors, ensuring they operate to specification.
S43	Check, adjust and repair tensioning systems for example handrail tension, main drive chain tension, step chain tension. Split, remove and replace chains.
S44	Conduct planned and reactive escalator or moving walk maintenance.

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