1. Title	Perform periodic escalator safety inspection and testing
2. Code	EMLEIT305A
3. Range	Arrange and implement periodic escalator safety inspection and testing at field locations.
4. Level	3
5. Credit	3
6. Competency	Performance Requirements 6.1 Working principles and testing and examination reports for the devices of escalators system ♦ Understand working principles of the devices for escalator including: • devices in the driving station • devices inside the truss • devices outside the truss • devices in the reversing station ♦ Understand the requirements of testing and examination report, including: • driving motor with associated overload protective devices • safety equipment with particular regard to the brake and the stopping distance the escalator • control equipment and safety equipment • any sign of wear and tear for driving elements and insufficient tension of belts and chains • vision inspection and running inspection of steps • dimension and tolerances to ensure that dimensions specified are maintained despite wear • combplate for proper condition and adjustment • balustrade interior panelling, skirting and skirt panel deflector devices • handrails • preventive measures provided in safeguarding adjacent building obstacles from causing injuries to the users • at floor intersections and on criss-cross escalators • insulation resistance and electrical continuity • safety notices and signs

	6.2 Methods and procedures for periodic escalator safety inspection and testing	♦ Formulate periodic safety inspection and testing procedure lists for escalators of different kinds of driving mode including: • all kinds of driving station devices • all kinds of truss internal devices • all kinds of truss external devices • all kinds of reversing station devices ♦ Effectively use protective barriers or guards to implement and assign safety measures at work sites including: • safety preparation works for shutdown • safey works for working • safety procedures for resume operation ♦ Effectively use different kinds of tools, instruments and testing and examination forms to implement and assign periodic safety inspection and testing work for escalators including: • static examination e.g. the comb plates and terminal guides adjusted properly; has the brake been examined and found to be in order; is an auxiliary brake provided • dynamic tests e.g. does the operation brake operate properly; is the stopping distance is normal; does the auxiliary brake operate properly; does the overspeed device operate properly • drive motor current tests e.g. voltage and rated power at time of test; overload protection test; do machine room /power socket have separate power supply • clearances such as clearance between steps; clearance between step and adjacent skirting, total clearance between step and both skirting, clearance between the upper surface of the step and the root of the comb teeth, distance between the floor and the lower point of the handrail into the newel • insulation resistance to earth such as power system and safety circuit • earthing such as all metalwork enclosing conductors and the maximum continuity resistance to earth • half hour run such as running unladen, 15 minutes in upward direction followed by 15 minutes in downward direction

		• general inspection (escalator work) such as emergency stop switches, broken step chain device, broken drive chain/belt device, handrail inlet switch, non-reversal device, combplate switch, operation brake, step sagging device, skirt panel switch, phase protection device, overspeed device, broken handrail device and auxiliary brake • general inspection (other works) such as notices/pictographs for passengers, guards at adjacent building obstacles and criss-cross escalators, rigid guard adjacent to escalator handrail, notice on access door to machinery spaces, unrestricted landing areas and the clear height above step
	6.3 Professionalism in full periodic escalator safety inspection and testing	♦ Apply manufacturer's repair instructions, the code of practice for escalator design and construction and code of practice for escalator work to implement and assign periodic safety inspection and testing work for escalators
7. Assessment Criteria	The integrated outcome requirements of this unit of competency are: (i) Capable to arrange and assign completed periodic safety inspection and testing procedures for escalators systematically and through effective communication; and (ii) Capable to implement escalator completed periodic safety inspection and testing of under general or complicated situations in compliance with the prescribed standards of the code of practice for escalator design and construction.	
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses knowledge and skills in implementing escalator debugging or commissioning.	