

**SKILLS FRAMEWORK FOR LANDSCAPE
TECHNICAL SKILLS AND COMPETENCIES (TSC) REFERENCE**

TSC Category	Landscape Engineering					
TSC	Skyrise Greenery Design and Implementation					
TSC Description	Design and install skyrise greenery systems in built-up areas					
TSC Proficiency Description	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
			LNS-GED-3007-1.1	LNS-GED-4007-1.1	LNS-GED-5007-1.1	
			Coordinate the installation of skyrise greenery systems	Lead the installation of skyrise greenery systems and provide inputs to the design concepts	Conceive, design and oversee the realisation of skyrise greenery systems	
Knowledge			<ul style="list-style-type: none"> • Characteristics and components of green walls, rooftop gardens and other skyrise greenery systems • Principles of horticulture applied in indoor and skyrise greenery • Systems and approaches to implementing skyrise greenery systems • Principles of irrigation applied in skyrise greenery • Functions of irrigation drip lines, remote monitoring systems, automation technology and sensors for skyrise greenery • Procedures for installation of skyrise greenery systems • Various modes of providing nutrition to plants in skyrise greenery systems • Hazards and risks associated with installation and maintenance of skyrise greenery systems • Relevant workplace safety and health (WSH) guidelines 	<ul style="list-style-type: none"> • Principles of horticulture applied in indoor and skyrise greenery • Types and characteristics of plant species suited to indoor and rooftop environment • Various approaches for implementing skyrise greenery systems • Principles of irrigation and plumbing applied in indoor and skyrise greenery systems • Various modes of providing nutrition to plants in skyrise greenery systems • Hazards and risks associated with installation and maintenance of skyrise greenery • Relevant workplace safety and health (WSH) guidelines 	<ul style="list-style-type: none"> • Client brief and requirements for design of skyrise greenery • Principles of design, colour theory and aesthetics and their application in indoor and skyrise greenery • Architectural design of the sites • Trends in skyrise greenery design • Principles of horticulture and their application in skyrise greenery design • Irrigation and plumbing systems for skyrise greenery designs • Relevant workplace safety and health (WSH) guidelines 	

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<p>Abilities</p>			<ul style="list-style-type: none"> • Provide inputs to plant and material selection and costing with market availability and updates • Develop implementation drawings for skyrise greenery and associated systems from the designs provided • Supervise site preparation before commencement of installation • Oversee the set-up of the frames or boundaries of the skyrise greenery systems • Oversee the installation of irrigation lines and pre-planted panels or pots • Coordinate with external vendors in the installation of automation systems for managing skyrise greenery • Test the establishment of the plants and the functioning of the irrigation systems • Develop installation reports to document the set-up of the skyrise greenery systems 	<ul style="list-style-type: none"> • Advise on implementation considerations for skyrise greenery • Contribute to the development of cost estimates for the design and implementation of skyrise greenery • Advise on plant species selection in alignment with the agreed concepts • Advise on suitable irrigation system for the skyrise greenery depending on budget, plant species and density, indoor site constraints for available light and maintenance requirements • Advise on media or hydroponic solutions to be used for skyrise greenery • Develop the implementation plans and schedules for the installation of the skyrise greenery systems • Oversee the procurement of materials in accordance with agreed designs and plant palettes • Review the installation of the skyrise greenery systems and the functioning of its components 	<ul style="list-style-type: none"> • Assess the indoor sites to determine feasibility of sustaining skyrise greenery based on space, plumbing and lighting constraints, and aesthetic considerations • Develop skyrise greenery design concepts based on client brief, site and maintenance considerations • Develop cost estimates for the design and implementation of the skyrise greenery • Select plant palettes for the skyrise greenery systems based on agreed concepts, lighting, resource and maintenance constraints • Review installation of skyrise greenery systems for adherence to agreed designs 	
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