## URBAN DESIGN GUIDELINES (UDG) FOR WOODLANDS CENTRAL (WOODLANDS REGIONAL CENTRE)

## **About Woodlands Central**

Woodlands Central will be a thriving commercial and community node within the Woodlands Regional Centre. Woodlands Regional Centre is well-positioned to take its place as the largest economic hub in Singapore's North region, with a diverse mix of office, retail, business park and industrial space spread across the two precincts, and proximity to established industrial estates. Together with the adjacent Woodlands North Coast precinct, Woodlands Central will be a walkable, pedestrian-centric regional hub serving the surrounding residents, as well as those in the North region.

At the junction of the North-South and Thomson-East Coast Lines (the latter opening from end 2019 onwards), and with a regional bus interchange, Woodlands Central will be easily accessible by public transport. New public plazas and cycling paths will make this mixed-use precinct a bustling destination for residents of the North. Refer *Appendix 1: Boundary Plan*.

This set of guidelines aims to guide the physical development of the area to ensure that individual buildings contribute to, and strengthen the planning vision for the area and create an attractive and pedestrian-friendly physical environment.

Gazetted monuments and conserved buildings are subject to specific conservation guidelines, which will take precedence over the guidelines below.

The planning parameters and urban design guidelines are:

Parameters	Requirements
Building Form & Massing	Building Form
o maconig	The overall building form and massing of individual buildings is to consider how the building will be viewed, as well as impact views from major approaches and key open spaces.
	The design of the building form and massing, together with the architectural treatment, is to consider the scale, form and architectural expression of the surrounding buildings, and be designed to create engaging and varied public spaces. Wall-like developments should be avoided.
	Building Facades
	The building façades of the development fronting all main roads and major public spaces are to be treated as main elevations.
	The building facades of the development are to be well-articulated with solid (walls) / void (fenestration) areas that draw upon a combination of different materials (e.g. concrete, brick, steel, glass, greenery, etc.).
	To create visual interest and to further break down the building mass, elements of tropical architecture such as sky terraces, balconies, sunshading louvers, deep recesses, window ledges, roof terraces, communal planter boxes and vertical green walls are to be provided as part of the development and integrated with the overall building form

Parameters	Requirements
	and architectural treatment of the development.
	Relevant Circulars:
	Sensitive Design and Development: An Industry Guide of Good
	Practices to minimize Wall-Like Development
Building Height	Selected developments may be subject to site-specific building height controls, which will take precedence over technical height controls, whichever is lower.
Building Setback and Building Edge	Woodlands Central is envisioned as a lushly landscaped precinct. In line with this vision, developments within Woodlands Central are to be set back from the boundary to create space for landscaping.
Last updated: 20 November 2020	Developments shall comply with the setback requirements in accordance with the prevailing Development Control guidelines. Selected developments may also be subject to site-specific setback controls, which will take precedence over prevailing DC guidelines.
	Where applicable, developments are to be built up to the building setback line to create a well-defined urban streetscape. Up to 40% of the length of the building façade, between the corners of the development, can be set back for articulation of the building form.
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Roofscape and Screening	The roof areas are to be considered as the "fifth" elevation and designed to complement the overall form, massing and architectural treatment of each development. The roofs can be designed to be usable outdoor spaces.
	Screening Requirements
	To ensure that the roof areas are well-designed and attractive when viewed from the surrounding developments, all service areas, mechanical and electrical (M&E) equipment, water tanks, etc., are to be located within and fully integrated into the building envelope and be visually well-screened from the top and all sides of the development.

Parameters	Requirements
	The performance requirements for the screening of roof-top services are as follows:
	a) To be screened from the top and on all sides;
	b) The spacing between the trellis or louver elements is to be equal to or less than their depth;
	c) The screening elements are to be orientated to cut off views from the street level and surrounding buildings.
	Relevant Circulars:
	Screening of Mechanical and Electrical Services and Car Parks
Night Lighting	Good night lighting can enhance the nightscape and district character. The night lighting scheme should bring out the key architectural features of the building form, crown, facades, gardens and landscaped areas.
Signage	All developments shall comply with LTA's signage and wayfinding requirements for Woodlands Regional Centre, and submit the signage layout and design to the relevant Authorities for detailed evaluation and approval before Temporary Occupation Permit (TOP) can be issued.
Public Space	It is important to provide public spaces within private developments for users to enjoy.
Appendix 2: Urban Design Plan – 1 <sup>st</sup> Storey Pedestrian Network & Activity	Selected developments are required to provide public spaces within the development site. These may be well-landscaped open spaces, or covered public spaces that provide a high degree of visual and physical porosity through the building.
Generating Uses  Last updated: 3 June 2022	Public spaces are to be publicly accessible at all times. They are to be connected to the key pedestrian routes at the 1st storey (such as open and covered walkways, through-block links, pedestrian malls and promenades), and, where applicable, designed to be well-integrated and easily accessible from the underground and elevated pedestrian networks within the development.
	The design of these public spaces shall comply with the Design Guidelines for Privately Owned Public Spaces (POPS).
	Relevant Circulars:  • Update to the Design Guidelines for Privately Owned Public Spaces (POPS)
Uses at the 1 <sup>st</sup> and 2 <sup>nd</sup> Storey Levels	To create vibrant precincts, as well as attractive and pedestrian-friendly streets, activity-generating uses (AGU) such as retail, food & beverage, and other active uses are to be provided at the following locations:
Appendix 2: Urban Design Plan – 1 <sup>st</sup> Storey Pedestrian Network &	The 1st storey of developments fronting pedestrian malls, through block links, key streets and public spaces.

Parameters	Requirements
Activity Generating Uses	For more information on AGUs, please refer to the <i>Development Control Handbook</i> .
Outdoor Refreshment Areas	Where allowed, Outdoor Refreshment Areas (ORA), i.e. outdoor dining areas, can be considered within the public areas or open spaces within private development sites. The scale and design of the ORA and its structures (if any) are to complement the adjacent building. They can only be considered as an extension of an adjoining indoor F&B unit and are for seating only.
	If provided, the Gross Floor Area (GFA) for the ORAs are to be computed as part of the maximum permissible GFA for the development and subject to the prevailing Development Control Guidelines under the Planning Act.
	Developers are encouraged to incorporate spaces for ORAs at the design stage. The ORAs are to be clearly defined to prevent encroachment onto the adjacent pedestrian thoroughfares e.g. through the use of different floor finishes or planters, etc.
Pedestrian Network	Woodlands Central is planned as a pedestrian-friendly area with a comprehensive sheltered network at multiple levels. This network provides convenient, comfortable, and seamless connections between developments, transport facilities, key spaces and attractions, and ensures all-weather comfort.
Appendix 2:	At-Grade Pedestrian Network
Urban Design Plan – 1 <sup>st</sup> Storey Pedestrian Network & Activity Generating Uses	The at-grade pedestrian network is augmented by covered walkways that provide all-weather protected pedestrian routes. All developments are required to provide covered walkways at the 1st storey along the site boundaries / lines of Road Reserves or the designated setback lines, unless otherwise specified. The covered walkways function as public amenities. They are to be kept free of obstruction at all times. In exchange, the area is exempted from GFA computation.
	The minimum width of the covered walkways is to be 3.6m or 5m. Where colonnades are provided, the internal clear width of the covered walkways is to be minimum 3.0m and 4.4m respectively. To provide adequate protection for pedestrians during inclement weather, the external soffit heights are to minimally match the width of the covered walkway.
	Through-Block Links
	Selected developments are required to provide through-block links to break down the scale and improve permeability of the streetblock.
	Covered walkways and linkways, as well as through-block links may be exempted from GFA computation if they form part of the larger pedestrian network. Specific design requirements have been imposed on some key sites, depending on the locations of these through-block links.

Parameters	Requirements
Appendix 3:	Underground Pedestrian Network (UPN)
UD Guide Plan – Underground Pedestrian Network	The UPN complements the 1st storey pedestrian network and provides direct connection to Woodlands Thomson-East Coast Line (TEL) station. As a guide, the UPLs are to be at least 6.0m wide (with AGUs on one side) or 7.0m (with AGUs on both sides) with a minimum 4.0m (clear) internal ceiling height of the walkway, unless otherwise specified.
	Vertical pedestrian circulation points are to be included within the building envelope to link the UPN to the covered walkways at the 1st storey or the periphery of the public spaces. Each vertical circulation point is to include a pair of two- way escalators, staircases, and two passenger lifts. The entire UPN and the associated vertical circulation points are to be kept open for public access during the opening hours of the Rail Transit System, unless otherwise specified, and be visible from the at-grade and underground pedestrian network.
Appendix 4:	Elevated Pedestrian Network (EPN)
UD Guide Plan – Elevated Pedestrian Network	The Elevated Pedestrian Network complements the at-grade pedestrian network to provide seamless connectivity between developments. Building owners and developers are required to provide elevated links to connect between buildings.
	Vertical pedestrian circulation points are to be included within the building envelope to link the EPN to the covered walkways at the 1st storey or the periphery of the public spaces. Each vertical circulation point is to include a pair of two- way escalators, staircases, and two passenger lifts. Unless otherwise specified, the entire EPN and the associated vertical circulation points are to remain open for the duration of the mall's developments' business operating hours, and be visible from the at-grade and elevated pedestrian network.
	General Conditions
	The pedestrian network on all levels is to be designed for universal access. GFA exemption is applicable for public spaces, covered walkways, through-block links, underground and elevated walkways, subject to the prevailing Development Control Guidelines.
Servicing, Vehicular Access & Car Parks	All driveways and vehicular accesses are to be located away from public spaces or main pedestrian routes. This is to create a seamless and pedestrian-friendly network that is uninterrupted by vehicles.
	To maintain an attractive streetscape, any above-grade car park and service areas, including refuse bin centre(s), loading / unloading bays and vehicle ingress/ egress, storage lane(s), and vehicular drop-offs/ lay-bys, etc. are to be fully integrated within the overall building form, and visually well-screened from above and on all sides. Electrical substation(s), where required, can be located at-grade but are not to front onto the main roads, pedestrian malls, or public spaces.

Parameters	Requirements
	Sufficient holding bays for the vehicular access points to the car parks and service areas are to be provided within the development to ensure the smooth flow of vehicles along adjacent roads.
	Relevant Circulars:     Screening of Mechanical and Electrical Services and Car Parks
Greenery Replacement and Landscaping	To create a green and sustainable city, all new developments will be required to incorporate landscaping in the form of sky terraces and roof gardens according to the Landscape Replacement Area (LRA) requirements, unless otherwise specified. For more information, please refer to the <i>Development Control Handbook</i> .
Works within	Open Walkway
the Road Reserves	As a guide, the open walkway within the Road Reserve is safeguarded for pedestrian use. Any proposed new paving with the Road Reserve will be subject to URA and LTA's requirements and approval.
	Tree and Shrub Planting Specifications
	Any new tree or shrub planting specifications for the planting verge within the adjacent Road Reserves will be subject to URA and NParks' requirements and approval.
	Connection to Commuter Facilities
	For developments with commuter facilities (e.g. bus stops and taxi stands) located in front of their buildings, sheltered linkways are to be provided between the covered walkways at the 1st storey to these facilities to provide direct continuous sheltered connections.
	Dedicated Cycling Routes Certain key roads within Woodlands Central will be earmarked as dedicated cycling routes (please refer to the Special Detailed Control Plan: Connectivity Plan). The alignment, width and design of the cycling routes and associated street furniture are to be coordinated with URA and LTA.