

City of Mississauga Green Development Standard

Tier 1 Medium- and High-Rise Multi-Unit Residential

APPLICABILITY: MEDIUM- AND HIGH-RISE MULTI-UNIT RESIDENTIAL DEVELOPMENT (≥ 5 STOREYS)

INSTRUCTIONS

The following Tier 1 checklist is applicable to medium- and high-rise multi-unit residential (≥ 5 storeys) development targeting Tier 1 performance requirements of Mississauga’s Green Development Standard. The Medium- and High-Rise Multi-Unit Residential Development Guidebook provides additional details on the performance requirements, submission and documentation requirements, specifications and applicable site exclusions, and resources to assist applicants in completing their GDS submission. Applicants are required to complete the Developer Checklist using the information provided in the Guidebook.

PROJECT INFORMATION

Project Address

Application Number

Date Received

Theme 1: Energy and Building Performance



METRIC	TIER 1 REQUIREMENTS	SUBMISSION REQUIREMENTS FOR SITE PLAN APPROVAL	REFERENCE PLAN AND DRAWINGS NUMBER, AND/OR REPORT NAME
EB1: ENERGY PERFORMANCE	GHGI: 15 kgCO ₂ e/m ² /yr TEUI: 135 kWh/m ² TEDI: 50 kWh/m ²	<ul style="list-style-type: none"> Design Development Stage Energy Modelling Report 	

Theme 2: Climate Impact



METRIC	TIER 1 REQUIREMENTS	SUBMISSION REQUIREMENTS FOR SITE PLAN APPROVAL	REFERENCE PLAN AND DRAWINGS NUMBER, AND/OR REPORT NAME
C11: EMBODIED CARBON	Conduct an Upfront Embodied Emissions Assessment for A1–A5 life-cycle stage emissions in accordance with CAGBC Zero Carbon Building Standard	<ul style="list-style-type: none"> Materials Emissions Assessment Report: CAGBC Zero Carbon Building Embodied Carbon Reporting Template (V3 or later) 	

Theme 3: Resilience



METRIC	TIER 1 REQUIREMENTS	SUBMISSION REQUIREMENTS FOR SITE PLAN APPROVAL	REFERENCE PLAN AND DRAWINGS NUMBER, AND/OR REPORT NAME
R1: EMISSIONS FREE ENERGY AND STORAGE	Provide a minimum of 5% of building’s annual energy consumption from one or a combination of acceptable renewable energy sources	<ul style="list-style-type: none"> Letter of Commitment: quantify percentage of energy consumption from one or combination of renewable energy sources Elevation Plans and Floor Plans: modifications to enable renewable energy systems and storage 	
R2: REFUGE AND BACK-UP POWER GENERATION	<p>Submit Resilience Planning Checklist</p> <p>Provide 24 hours of back-up power</p> <p>Provide a refuge area with heating, cooling, lighting, potable water, and back-up power available.</p>	<ul style="list-style-type: none"> Completed Resilience Planning Checklist Floor Plan: refuge area location and size, and amenities Letter of Commitment: back-up power and thermal energy to central refuge area and essential building systems 	

Theme 4: Ecology



METRIC	TIER 1 REQUIREMENTS	SUBMISSION REQUIREMENTS FOR SITE PLAN APPROVAL	REFERENCE PLAN AND DRAWINGS NUMBER, AND/OR REPORT NAME
E1: BIRD FRIENDLY GLAZING AND DESIGN	Align bird-friendly designs with Canadian Standards Association (CSA) A460: 19: Bird Friendly Design standards for treatment of glazing materials, building integrated permanent structures, and overall building and site design	<ul style="list-style-type: none"> Elevation Plan, Floor Plan, Landscape Plan, and Roof Plan: indicate bird-friendly designs, rooftop vegetation, and ground-level ventilation grate treatments Site Statistics Template: Bird Friendly Design Statistics Section 	
E2: EXTERIOR LIGHTING	All exterior fixtures must be Dark Sky Compliant and all rooftop and exterior facade architectural illumination must be directed downward	<ul style="list-style-type: none"> Site Plan, Landscape Plan, and Elevation Plan: identify location of all exterior lighting and illumination direction; DarkSky compliance of all exterior lighting; and Exclusions. 	

Theme 5: Natural Systems



METRIC	TIER 1 REQUIREMENTS	SUBMISSION REQUIREMENTS FOR SITE PLAN APPROVAL	REFERENCE PLAN AND DRAWINGS NUMBER, AND/OR REPORT NAME
NS1: HEAT ISLAND EFFECT	Use combination of the following strategies to treat at least 75% of the site's (non-roof) hardscape: <ul style="list-style-type: none"> High-albedo paving materials Open grid pavement and/or permeable surfaces Shade from existing or new tree canopy Shade from energy generation structures 	<ul style="list-style-type: none"> Site Statistics Template: Landscape and Natural Systems Statistics Section Materials List: SRI of high albedo paving Landscape Plan: treated hardscape and soft landscaping 	

Theme 5: Natural Systems



METRIC	TIER 1 REQUIREMENTS	SUBMISSION REQUIREMENTS FOR SITE PLAN APPROVAL	REFERENCE PLAN AND DRAWINGS NUMBER, AND/OR REPORT NAME
NS2: TREE GROWTH	<p>Plant 'shade trees' 6-8 m (20- 27 ft.) apart along the street frontages, and should be drought tolerant and non-invasive</p> <p>Provide adequate rooting space to support tree health and growth, through the minimum soil volume of 30m³ for each new tree</p>	<ul style="list-style-type: none"> • Landscape Plan: location of all new tree plantings, and species list • Soil Report signed by qualified professional • Site Statistics Template: Tree Growth Section 	
NS3:CLIMATE-RESILIENT LANDSCAPES	<p>In all landscaped areas, including green roofs, plant a minimum of 50% native plants and comply with Ontario Invasive Plant Council Guidelines, including:</p> <ul style="list-style-type: none"> • Minimum of 2 native flowering species to provide continuous bloom throughout the growing season to support pollinators • Preference for drought tolerant native species <p>For vegetated buffer areas, adjacent Significant Natural Features, plant 100% native plants</p> <p>Provide a natural heritage restoration and/or enhancement plan with the proposed locations of natural heritage restoration, design specifications, and ecological function</p>	<ul style="list-style-type: none"> • Landscape Plan: native plantings, plant list, and irrigation requirements • Natural Heritage Restoration Plan and/or Enhancement Plan 	

Theme 5: Natural Systems



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NS4: SUSTAINABLE ROOFS	<p>Buildings with an available roof area larger than 500m² must include one or a combination of green roof, cool roof, blue roof and/or solar PV:</p> <ul style="list-style-type: none"> • Green roof and/or blue roof for at least 50% of Available Roof Space (calculated using GDS Guidebook) • Cool roof installed for 100% of Available Roof Space (calculated using GDS Guidebook) • Use a combination of a green, blue, cool roof or solar PV for at least 75% of Available Roof Space 	<ul style="list-style-type: none"> • Floor Plan, and Roof Plan: green roof, cool roof, and/or blue roof locations identified on elevations and roof plan • Landscape Plan (Green Roofs): the potable irrigation systems servicing the green roof and submit maintenance plan • Stormwater Management Report and Plan (Blue Roofs): quantifying blue roof storage and run-off • Site Statistics Template: Sustainable Roofs Section 	