

# City of Mississauga Green Development Standard

## Low-Rise Multi-Unit Residential Mandatory Developer Checklist

### APPLICABILITY: LOW-RISE MULTI-UNIT RESIDENTIAL DEVELOPMENT (≤ 4 STOREYS)

#### INSTRUCTIONS

The following checklist is applicable to low-rise multi-unit residential (≤ 4 storeys with 10 units or more) development targeting Tier 1 performance requirements of Mississauga’s Green Development Standard (GDS). The Low-Rise 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 Submitted:

### 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
<b>EB1: ENERGY PERFORMANCE</b>	Design the building(s) to achieve at least ENERGY STAR® for New Homes, version 17.1 or R-2000 requirements.	<ul style="list-style-type: none"> <li>ENERGY STAR® Certification Report.</li> <li>Completed Ontario Building Code’s Energy Efficiency Design Summary: Performance and Other Acceptable Compliance Methods form.</li> <li>Builder Option Package (BOP) form for ENERGY STAR® v. 17.1 or R-2000.</li> </ul>	

## Theme 2: Climate Impact



METRIC	TIER 1 REQUIREMENTS	SUBMISSION REQUIREMENTS FOR SITE PLAN APPROVAL	REFERENCE PLAN AND DRAWINGS NUMBER, AND/OR REPORT NAME
<b>C11: EMBODIED CARBON</b>	Conduct an Upfront Embodied Emissions assessment to measure A1-A3 life-cycle stage emissions for all structural, enclosure and major finishes.	<ul style="list-style-type: none"> <li>Upfront Embodied Emissions Assessment report using Building Emissions Accounting for Materials (BEAM) or Material Carbon Emissions Estimation (MCE2) model.</li> </ul>	

## Theme 3: Resilience



METRIC	TIER 1 REQUIREMENTS	SUBMISSION REQUIREMENTS FOR SITE PLAN APPROVAL	REFERENCE PLAN AND DRAWINGS NUMBER, AND/OR REPORT NAME
<b>R1: EMISSIONS FREE ENERGY AND STORAGE</b>	<p>Minimum of 5% of the building's annual energy consumption from one or a combination of renewable energy sources.</p> <p>OR</p> <p>Meet the NRCan Solar Ready Guidelines for solar domestic hot water and photovoltaic systems.</p>	<ul style="list-style-type: none"> <li><b>Letter of Commitment:</b> quantify percentage of energy consumption from renewable energy sources.</li> <li>Building elevations and floor plans: modifications to enable renewable energy systems and storage.</li> <li>NRCan Solar Ready Guideline's Checklist.</li> </ul>	
<b>R2: REFUGE AND BACK-UP POWER GENERATION</b>	Submit <b>Resilience Planning Checklist</b> .	<ul style="list-style-type: none"> <li>Completed <b>Resilience Planning Checklist</b>.</li> </ul>	

## Theme 4: Ecology



METRIC	TIER 1 REQUIREMENTS	SUBMISSION REQUIREMENTS FOR SITE PLAN APPROVAL	REFERENCE PLAN AND DRAWINGS NUMBER, AND/OR REPORT NAME
<b>E1: BIRD FRIENDLY GLAZING AND DESIGN</b>	<p>Treat a minimum of 90% of exterior building glazing 16 m above grade.</p> <p>Visual markers with maximum spacing of 50 mm x 50 mm with a minimum 6 mm in diameter.</p>	<ul style="list-style-type: none"> <li>Building elevations, floor plan, landscape plan, and roof plan: indicate bird-friendly designs, rooftop vegetation, and ground-level ventilation grate treatments.</li> </ul>	
<b>E2: EXTERIOR LIGHTING</b>	<p>All exterior fixtures must be Dark Sky Compliant and must be directed downward.</p>	<ul style="list-style-type: none"> <li>Engineer certified lighting plan: identify location of all exterior lighting and illumination direction; DarkSky compliance of all exterior lighting.</li> </ul>	

## Theme 5: Natural Systems



METRIC	TIER 1 REQUIREMENTS	SUBMISSION REQUIREMENTS FOR SITE PLAN APPROVAL	REFERENCE PLAN AND DRAWINGS NUMBER, AND/OR REPORT NAME
<b>NS1: HEAT ISLAND EFFECT</b>	<p>Treat at least 75% of the site's (non-roof) hardscape utilizing the following strategies:</p> <ul style="list-style-type: none"> <li>• High-albedo paving materials.</li> <li>• Open grid pavement and/or permeable surfaces.</li> <li>• Shade from existing or new tree canopy.</li> <li>• Shade from energy generation structures.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Site Statistics Template.</b></li> <li>• Materials list: SRI of high albedo paving.</li> <li>• Landscape plan: treated hardscape and soft landscaping.</li> </ul>	
<b>NS2: TREE GROWTH</b>	<p>Plant 'shade trees' 6-8 m (20- 27 ft.) apart along the street frontages.</p> <p>All tree planting area(s) have access to 30m<sup>3</sup> of soil.</p>	<ul style="list-style-type: none"> <li>• Landscape plan: location of all new tree plantings, and species list.</li> <li>• <b>Soil Volume Breakdown Template.</b></li> </ul>	
<b>NS3: CLIMATE-RESILIENT LANDSCAPES</b>	<p>Landscaped areas include 50% native plants and native flower species and comply with the Ontario Invasive Plant Council Guidelines:</p> <ul style="list-style-type: none"> <li>• Minimum of 2 native flowering species to provide continuous bloom throughout the growing season to support pollinators.</li> </ul> <p>Vegetated buffer areas, adjacent to Significant Natural Features, include 100% native plants.</p>	<ul style="list-style-type: none"> <li>• Landscape plan: native plantings, plant list, and irrigation requirements.</li> <li>• Natural heritage restoration plan and/or enhancement plan.</li> </ul>	

## Theme 5: Natural Systems



METRIC	TIER 1 REQUIREMENTS	SUBMISSION REQUIREMENTS FOR SITE PLAN APPROVAL	REFERENCE PLAN AND DRAWINGS NUMBER, AND/OR REPORT NAME
<b>NS4: SUSTAINABLE ROOFS</b>	<p>Buildings with an available roof area larger than 500m<sup>2</sup> must include one or a combination of green roof, cool roof, blue roof and/or solar PV:</p> <ul style="list-style-type: none"> <li>Green roof and/or blue roof for at least 50% of available roof space.</li> <li>Cool roof installed for 100% of available roof space.</li> <li>Use a combination of a green, blue, cool roof or solar PV for at least 75% of available roof space.</li> </ul>	<ul style="list-style-type: none"> <li>Floor plan, and roof plan: green roof, cool roof, and/or blue roof locations identified on elevations and roof plan.</li> <li>Landscape plan (green roofs): the potable irrigation systems servicing the green roof and submit maintenance plan.</li> <li>Stormwater Management Report and Plan (blue roofs): quantifying blue roof storage and run-off.</li> <li><b>Site Statistics Template.</b></li> </ul>	