City of Mississauga Green Development Standard

Tier 1 Institutional and Commercial Developer Checklist

APPLICABILITY: INSTITUTIONAL AND COMMERCIAL

INSTRUCTIONS

The following Green Development Standard Checklist is applicable to institutional and commercial development and provides performance targets associated with Tier 1 of Mississauga's Green Development Standard. The Institutional and Commercial Development Guidebook provides additional details and resources on the performance targets and includes guidance on supplemental documentation that applicants are encouraged to submit to support their application. Applicants are required to complete and submit the Green Development Standard Checklist as part of a Complete Application and are encouraged to provide any additional information to the best of their ability based on the stage of project design and information available at the time of submission. For additional information regarding the Green Development Standard or completion of the Checklist, please contact greendevelopment@mississauga.ca.

PROJECT INFORMATION

Project Address

Application Number

Date Received

Theme 1: Energy and Building Performance

METRIC	PERFORMANCE TARGETS	ACHIEVED METRICS	NOTES AND/OR REMARKS
EB1: ENERGY PERFORMANCE	Commercial office and institutional: • GHGI: 15 kg $CO_2e/m^2/yr$ • TEUI: 130 $kWh/m^2/yr$ • TEDI: 30 $kWh/m^2/yr$ Commercial retail: • GHGI: 10kg $CO_2e/m^2/yr$ • TEUI: 120 $kWh/m^2/yr$ • TEDI: 40 $kWh/m^2/yr$	Commercial office and instiutrional: GHGI: $kgCO_2e/m^2/yr$ TEUI: $kWh/m^2/yr$ TEDI: $kWh/m^2/yr$ Commerciral retail GHGI: $kgCO_2e/m^2/yr$ TEUI: $kWh/m^2/yr$ TEDI: $kWh/m^2/yr$	

Theme 2: Climate Impact



METRIC	PERFORMANCE TARGETS	ACHIEVED METRICS	NOTES AND/OR REMARKS
CI1: EMBODIED CARBON	Conduct an Upfront Embodied Emissions Assessment for A1–A5 life- cycle stage emissions in accordance with CAGBC Zero Carbon Building Standard	☐ Embodied Emissions Assessment Report completed	
CI2: ELECTRIC VEHICLE (EV) CHARGING INFRASTRUCTURE	Equip 10% of all parking spaces with an energized outlet Level 2 charging or higher installed adjacent to the space for the purpose of EV charging Provide signage indicating that the spaces with chargers are for customers and/or employees	☐ Minimum 10% of all parking spaces equipped with level 2 charging or higher ☐ Signage provided	

Theme 3: Resilience



METRIC	PERFORMANCE TARGETS	ACHIEVED METRICS	NOTES AND/OR REMARKS
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	☐ Minimum 5% of buildings annual energy consumption from renewable sources	

Theme 3: Resilience



METRIC	PERFORMANCE TARGETS	ACHIEVED METRICS	NOTES AND/OR REMARKS
R2: REFUGE AND BACK-UP POWER GENERATION	Commercial office, retail, and institutional: • Submit a Resilience Planning Checklist • Provide 24 hours of back-up power Commercial office, and institutional: • Provide a refuge area with heating, cooling, lighting, potable water, and power available	☐ Resilience Planning Checklist completed ☐ Minimum 24 hours of backup power provided ☐ Refuge Area provided	

Theme 4: Ecology



METRIC	PERFORMANCE TARGETS	ACHIEVED METRICS	NOTES AND/OR REMARKS
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	☐ Bird friendly design and glazing provided in accordance with CSA A460:19	
E2: EXTERIOR LIGHTING	All exterior fixtures must be Dark Sky Compliant and all rooftop and exterior facade architectural illumination must be directed downward	☐ All exterior fixtures are Dark Sky compliant	

Theme 5: Natural Systems

METRIC	PERFORMANCE TARGETS	ACHIEVED METRICS	NOTES AND/OR REMARKS
NS1: HEAT ISLAND EFFECT	Use combination of the following strategies to treat at least 50% of the site's (non-roof) hardscape: • High-albedo paving materials • Open grid pavement and/or permeable surfaces • Shade from existing or new tree canopy • Shade from energy generation structures	☐ Minimum 50% of the site's non-roof hardscaping treated	
NS2: TREE GROWTH	Plant 'shade trees' 6-8 m (20- 27 ft.) apart along the street frontages, and should be drought tolerant and non-invasive Provide adequate rooting space to support tree health and growth, through the minimum soil volume of 30m^3 for each new tree	☐ Shade trees proposed in accordance to spacing requirements ☐ Minimum 30m^3 of soil provided for each tree	

Theme 5: Natural Systems



METRIC	PERFORMANCE TARGETS	ACHIEVED METRICS	NOTES AND/OR REMARKS
NS3:CLIMATE-RESILIENT LANDSCAPES	In all landscaped areas, including green roofs, plant a minimum of 50% native plants and comply with Ontario Invasive Plant Council Guidelines, including: • Minimum of 2 native flowering species to provide continuous bloom throughout the growing season to support pollinators • Preference for drought tolerant native species For vegetated buffer areas, adjacent Significant Natural Features, plant 100% native plants Provide a natural heritage restoration and/or enhancement plan with the proposed locations of natural heritage restoration, design specifications, and ecological function	☐ Minimum 50% native species inclueded within landscaped areas ☐ Minimum 2 native flowering species provided ☐ 100% native plants included in buffer areas next to significant natural resources	
NS4: SUSTAINABLE ROOFS	Buildings with an available roof area larger than 500m^2 must include one or a combination of green roof, cool roof, blue roof and/or solar PV: • 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	☐ Green/blue roof covering at least 50% of available roof space or ☐ Cool roof installed on 100% of available roof space or ☐ Combination of green/ blue/cool roof or solar panels installed on 75% of available roof space	