Planning and Building Department
Development and Design Division
T: 905-615-3200 x5522
www.mississauga.ca

City of Mississauga Green Development Standard

Mid-Rise and High-Rise Multi Unit Residential High Performance Developer Checklist

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

INSTRUCTIONS

The following checklist is applicable to mid-rise and high-rise multi-unit residential (≥ 5 storeys) development targeting Tier 2 or Tier 3 high performance requirements of Mississauga's Green Development Standard (GDS). The Mid-Rise 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 Submitted:

Theme 1: Energy and Building Performance

METRIC	TIER 2 REQUIREMENTS	TIER 3 REQUIREMENTS	SUBMISSION REQUIREMENTS FOR SITE PLAN APPROVAL	REFERENCE PLAN AND DRAWINGS NUMBER, AND/ OR REPORT NAME
EB1: ENERGY PERFORMANCE	GHGI: 10 kg $CO_2e/m^2/yr$ TEUI: 100 kWh/m^2 TEDI: 30 kWh/m^2	GHGI: 5 kg $CO_2e/m^2/yr$ TEUI: 75 kWh/m^2 TEDI: 15 kWh/m^2	• Design Development Stage **Energy Modeling Report**. • **Letter of Commitment**: Energy Modeling Report based on as-built construction drawings.	

Planning and Building Department
Development and Design Division
T: 905-615-3200 x5522
www.mississauga.ca

METRIC	TIER 2 REQUIREMENTS	TIER 3 REQUIREMENTS	SUBMISSION REQUIREMENTS FOR SITE PLAN APPROVAL	REFERENCE PLAN AND DRAWINGS NUMBER, AND/ OR REPORT NAME
EB2: AIR TIGHTNESS TESTING	Conduct a whole-building air leakage test: Target equal to or less than 2.0 L/s/m² (at 75 Pa).	Achieve Tier 2 requirements, plus: Target equal to or less than 1.0 L/s/m² (at 75 Pa).	• **Letter of Commitment**: Air leakage testing plan from third-party testing agency during Construction Document Stage. • **Letter of Commitment**: Post-construction air leakage testing report.	
EB3: BENCHMARKING AND COMMISSIONING	Enroll the project in ENERGY STAR® Portfolio Manager to benchmark and report on operational energy performance. Complete the required commissioning (Cx) process activities in accordance with ASHRAE Guideline 0-2005 and ASHRAE Guideline 1.1–2007.	Achieve Tier 2 requirements.	• ENERGY STAR® Portfolio Manager enrollment. • Building Commissioning Report.	

Planning and Building Department
Development and Design Division
T: 905-615-3200 x5522
www.mississauga.ca

Theme 2: Climate Impact

METRIC	TIER 2 REQUIREMENTS	TIER 3 REQUIREMENTS	SUBMISSION REQUIREMENTS FOR SITE PLAN APPROVAL	REFERENCE PLAN AND DRAWINGS NUMBER, AND/ OR REPORT NAME
CI1: EMBODIED CARBON	Conduct an Upfront Embodied Emissions Assessment for A1–A5 life-cycle stage emissions. Demonstrate an emissions intensity of less than 330 kg CO_2/m^2.	Achieve Tier 2 requirements, plus: Demonstrate an emissions intensity of less than 250 kg CO_2/m^2.	• Materials Emissions Assessment Report: CAGBC Zero Carbon Building Embodied Carbon Reporting Template (V3 or later).	
CI2: ELECTRIC VEHICLE CHARGING INFRASTRUCTURE	MURBs with garages, driveways, or adjacent parking spaces: provide electrical infrastructure capable of supplying Level 2 charging or higher. MURBs with above or below ground parking structures: • Equip 25% of resident parking spaces with Level 2 or higher EVSE and remaining with EV-Ready outlets. • Provide a minimum of 1 visitor parking spaces with Level 2 or higher EVSE.	MURBs with garages, driveways, or adjacent parking spaces: provide electrical infrastructure capable of supplying Level 2 charging or higher. MURBs with above or below ground parking structures: • Equip 30% of resident parking spaces with Level 2 or higher EVSE and remaining with EV-Ready outlets. • Provide a minimum of 1 visitor parking spaces with Level 2 or higher EVSE.	• Parking plans: EV and EV-Ready spaces, performance level. • **Letter of Commitment**: Number of EVSE and rough-ins provided and the percentage of parking spaces with EVSE and rough-ins. • **Site Statistics Template**.	

Planning and Building Department
Development and Design Division
T: 905-615-3200 x5522
www.mississauga.ca

METRIC	TIER 2 REQUIREMENTS	TIER 3 REQUIREMENTS	SUBMISSION REQUIREMENTS FOR SITE PLAN APPROVAL	REFERENCE PLAN AND DRAWINGS NUMBER, AND/ OR REPORT NAME
CI3: CONSTRUCTION WASTE MANAGEMENT	Develop and implement a construction and demolition waste management plan, and divert at least 75% of total construction and demolition material from landfill. OR Produce less than 100 kg/m^2 of construction and demolition waste through reuse and source reduction design strategies.	Develop and implement a construction and demolition waste management plan, and divert at least 90% of total construction and demolition material from landfill. OR Produce less than 75 kg/ m^2 of construction and demolition waste through reuse and source reduction design strategies.	• Construction and Waste Management Plan. • **Letter of Commitment**: Post-construction report.	
CI4: INTERIOR WASTE	Provide a shared access to central waste collection and waste diversion, and a minimum of three waste streams are required at each collection station: garbage, recycling, and composting.	Achieve Tier 2 requirements, plus: Provide a minimum of 1 m^2 for every 100 units of dedicated household hazardous waste and electronic waste collection space. Provide in-cabinet space in all kitchen sets for three waste stream sorting: garbage, recycling, and composting.	• Floor plan: identify waste collection areas, sizes, and techniques used.	
CI5: BICYCLE PARKING AND AMENITIES	Provide at least 1 bike repair station in a publicly accessible location at grade or on the first level of parking. Equip 15% of the long-term bike parking with an Energized Outlet (120V).	Achieve Tier 2 requirements.	• Transportation Study indicate the types and locations of cycling amenities included. • **Site Statistics Template**.	

Planning and Building Department
Development and Design Division
T: 905-615-3200 x5522
www.mississauga.ca

Theme 3: Resilience

METRIC	TIER 2 REQUIREMENTS	TIER 3 REQUIREMENTS	SUBMISSION REQUIREMENTS FOR SITE PLAN APPROVAL	REFERENCE PLAN AND DRAWINGS NUMBER, AND/ OR REPORT NAME
R1: EMISSIONS FREE ENERGY AND STORAGE	Minimum of 15% of the building's annual energy consumption from one or a combination of renewable energy sources.	Minimum of 50% of the building's annual energy consumption from one or a combination of renewable energy sources.	• **Letter of Commitment**: Quantify percentage of energy consumption from renewable energy sources. • Design Development Stage **Energy Modeling Report**. • Building elevations and floor plans: modifications to enable renewable energy systems and storage.	
R2: REFUGE AND BACK-UP POWER GENERATION	Submit a **Resilience Planning Checklist**. Provide 48 hours of back-up power. Provide a refuge area with heating, cooling, lighting, potable water, and power available.	Achieve Tier 2 requirements, plus: Provide 72 hours of back-up power.	• 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.	

Planning and Building Department
Development and Design Division
T: 905-615-3200 x5522
www.mississauga.ca

Theme 4: Ecology

METRIC	TIER 2 REQUIREMENTS	TIER 3 REQUIREMENTS	SUBMISSION REQUIREMENTS FOR SITE PLAN APPROVAL	REFERENCE PLAN AND DRAWINGS NUMBER, AND/OR REPORT NAME
E1: BIRD FRIENDLY GLAZING AND DESIGN	Treat a minimum of 90% of exterior building glazing 16 m above grade. Visual markers with maximum spacing of 50 mm x 50 mm with a minimum 6 mm in diameter.	Achieve Tier 2 requirements.	• Building elevations, floor plan, landscape plan, and roof plan: indicate bird-friendly designs, rooftop vegetation, and ground-level ventilation grate treatments.	
E2: EXTERIOR LIGHTING	All exterior fixtures must be Dark Sky Compliant and must be directed downward.	Achieve Tier 2 requirements.	• Engineer certified lighting plan: identify location of all exterior lighting and illumination direction; DarkSky compliance of all exterior lighting.	

Planning and Building Department
Development and Design Division
T: 905-615-3200 x5522
www.mississauga.ca

Theme 5: Natural Systems

METRIC	TIER 2 REQUIREMENTS	TIER 3 REQUIREMENTS	SUBMISSION REQUIREMENTS FOR SITE PLAN APPROVAL	REFERENCE PLAN AND DRAWINGS NUMBER, AND/ OR REPORT NAME
NS1: HEAT ISLAND EFFECT	Treat at least 90% of the site's (non-roof) hardscape utilizing the following strategies: • High-albedo paving materials. • Open grid pavement and/ or permeable surfaces. • Shade from existing or new tree canopy. • Shade from energy generation structures.	Achieve Tier 2 requirements.	• **Site Statistics Template**. • Materials list: SRI of high albedo paving. • Landscape plan: treated hardscape and soft landscaping.	
NS2: TREE GROWTH	Plant 'shade trees' 6-8 m (20- 27 ft.) apart along the street frontages. All tree planting area(s) have access to 30m^3 of soil.	Achieve Tier 2 requirements.	• Landscape plan: location of all new tree plantings, and species list. • **Soil Volume Breakdown Template**.	

Planning and Building Department
Development and Design Division
T: 905-615-3200 x5522
www.mississauga.ca

METRIC	TIER 2 REQUIREMENTS	TIER 3 REQUIREMENTS	SUBMISSION REQUIREMENTS FOR SITE PLAN APPROVAL	REFERENCE PLAN AND DRAWINGS NUMBER, AND/ OR REPORT NAME
NS3:CLIMATE-RESILIENT LANDSCAPES	Landscaped areas include 75% native plants and native flower species and comply with the Ontario Invasive Plant Council Guidelines: • Minimum of 2 native flowering species to provide continuous bloom throughout the growing season to support pollinators. Vegetated buffer areas, adjacent to Significant Natural Features, include 100% native plants.	Landscaped areas include 90% native plants and native flower species and comply with the Ontario Invasive Plant Council Guidelines: • Minimum of 2 native flowering species to provide continuous bloom throughout the growing season to support pollinators. Vegetated buffer areas, adjacent to Significant Natural Features, include 100% native plants.	• Landscape plan: native plantings, plant list, and irrigation requirements. • Natural heritage restoration plan and/or enhancement plan.	

Planning and Building Department
Development and Design Division
T: 905-615-3200 x5522
www.mississauga.ca

METRIC	TIER 2 REQUIREMENTS	TIER 3 REQUIREMENTS	SUBMISSION REQUIREMENTS FOR SITE PLAN APPROVAL	REFERENCE PLAN AND DRAWINGS NUMBER, AND/ OR REPORT NAME
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. • Cool roof installed for 100% of available roof space. • Use a combination of a green, blue, cool roof or solar PV for at least 75% of available roof space.	Achieve Tier 2 requirements.	• 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**.	
NS5: STORMWATER MANAGEMENT	Retain 80% runoff generated from a minimum of 27 mm depth of rainfall from all site surfaces.	Retain 100% runoff generated from a minimum of 27 mm depth of rainfall from all site surfaces.	• Stormwater Management Plan.	

Planning and Building Department
Development and Design Division
T: 905-615-3200 x5522
www.mississauga.ca

METRIC	TIER 2 REQUIREMENTS	TIER 3 REQUIREMENTS	SUBMISSION REQUIREMENTS FOR SITE PLAN APPROVAL	REFERENCE PLAN AND DRAWINGS NUMBER, AND/ OR REPORT NAME
NS6: WATER CONSUMPTION	Reduce irrigation water consumption by 60% using a combination of treatment measures for reuse of greywater and blackwater. Reduce building water consumption (not including irrigation) by 20% using water fixtures or non-potable water sources.	Reduce irrigation water consumption by 80% using a combination of treatment measures for reuse of greywater and blackwater. Reduce building water consumption (not including irrigation) by 40% using water fixtures or non-potable water sources.	• **Letter of Commitment**: Confirming potable and non-potable water reduction strategies.	