

# High Performance New Construction

**Instructions:** Complete for all types of projects seeking higher, voluntary levels of performance, and in conjunction with the full Toronto Green Standard Version 3 (TGS V3) and Specifications. Discuss your project with the Environmental Planning Office (416.392.0191).

All projects must complete Tier 1 and 2 levels of performance and demonstrate compliance in order to be eligible for the Development Charge Refund. Tier 1 is verified through Site Plan Approvals. Tier 2, 3 and 4 are third party verified and certified by prequalified consultants. Tier 2 includes the completion of all Core categories plus the selection of three (3) Optional performance measures. Review the current Development Charges Bylaw and Tier 2 Cap (refund) rates to determine your project's eligibility for a DC Refund.

Tier 3 and 4 performance measures are exchangeable and replace the same Tier 2 performance measures. Projects must select three (3) measures from Tier 3 or 4 to achieve the highest sustainable, low carbon developments in the City of Toronto. For more information about the standards and available incentives, go to [www.toronto.ca/greendevlopment](http://www.toronto.ca/greendevlopment).

**Performance Level Targeted:**                      **Tier 2**                      **Tier 3**                      **Tier 4**

**Development Type:**

- Low-Rise Part 9 Housing (>5 Dwelling Units)
- Non-Residential Commercial Office, Institutional or Retail
- Mid-High Rise Residential (Greater than 4 storeys)

**Eligibility:**

- Tier 1 compliance/documentation provided
- The project is subject to development charges payable
- Development Charge Refund application and information requested. Email to: [sustainablecity@toronto.ca](mailto:sustainablecity@toronto.ca)

**Property and Applicant Information**

Site Plan Application Number:	Building Permit Number (if known):
Project Name:	
Address of Subject Land (Street Number and Name):	
<b>Applicant/Agent</b>	
Name (First, Last):	Business Telephone Number:
Business Email:	Registered Owner (First, Last):



## High Performance New Construction

### TIER 2: Core (Complete all CORE performance measures for Tier 2 developments)

MHR- Mid-High Rise Residential & Non-residential Standard; LR- Low Rise Residential Standard

#### Air Quality (Core)

Development Feature	Performance Measure (See full standards and specifications for details and definitions)	Description What level of performance, and how is the performance measure being met?	Documentation required for third party certification (Issued for Construction)
UHI Non-roof Hardscape AQ 2.3 LR AQ 4.3 MHR	Treat at least 75% of non-roof hardscape to reduce the urban heat island effect		Landscape plan # Declaration template

#### Energy Efficiency, Greenhouse Gas Emissions & Resilience (Core)

##### Mid-High Rise Residential & Non-residential

Development Feature	Performance Measure (See full standards and specifications for details and definitions)	Description What level of performance, and how is the performance measure being met?	Documentation required for third party certification (Issued for Construction)
Energy Performance GHG 1.2 MHR	Design the building to achieve Tier 2 TEUI, TEDI and GHGI targets by building type (required) OR 25% improvement above OBC, SB-10, Division 3 (2017) for other building types		As-constructed Stage Energy Report
Solar Readiness GHG 2.1 MHR	Buildings are designed to accommodate connections to solar PV or solar thermal		Roof Plan # Other Plan # Declaration template
District Energy Ready GHG 3.1 MHR	Buildings are designed to connect to a planned DES		Parking Plan # Other Plan # Declaration template Community Energy Plan or Strategy Report
Benchmarking & Reporting GHG 4.1 MHR	Register the building on Energy Star Portfolio Manager		Declaration template

## High Performance New Construction

Development Feature	Performance Measure (See full standards and specifications for details and definitions)	Description What level of performance, and how is the performance measure being met?	Documentation required for third party certification (Issued for Construction)
Best Practice Commissioning GHG 4.2 MHR	Commission the building using best practice commissioning		Commissioning Plan/Report Declaration template
Air Tightness Testing GHG 4.3 MHR	Conduct a whole building Air Tightness Test		ATT Test Plan/Report Declaration template
Resilience Planning Checklist GHG 5.1 MHR	Summarize your project's approach to address climate change		Resilience Checklist

### Energy Efficiency, Greenhouse Gas Emissions (Core) Low Rise Housing

Development Feature	Performance Measure (See full standards and specifications for details and definitions)	Description What level of performance, and how is the performance measure being met?	Documentation required for third party certification (Issued for Construction)
Buildings Energy Performance GHG 1.2 LR	Design, construct and label the building to achieve at least Energy Star for New Homes V.17 or R-2000		Proof of Certification from a NRCAN Authorized Service Provider
Energy Efficient Appliances GHG 1.3 LR	Provide Energy Star labeled appliances		Declaration template
Solar Readiness GHG 2.2 LR	Buildings are designed to accommodate connections to solar PV or solar thermal		Roof Plan # Other Plan # Declaration template

## High Performance New Construction

### Water Balance, Quality & Efficiency (CORE)

Development Feature	Performance Measure (See full standards and specifications for details and definitions)	Description What level of performance, and how is the performance measure being met?	Documentation required for third party certification (Issued for Construction)
Stormwater Retention & Reuse WQ 2.2 LR; MHR	Retain runoff generated from a minimum of 10 mm depth of rainfall		Stormwater Report Landscape Plan # Other Plan #
Water Efficient Fixtures WQ 4.2 LR; MHR	Install water fixtures that achieve at least a 40% reduction in potable water consumption for the building (not including irrigation)		Declaration template
Water Efficient Irrigation WQ 4.3 LR; MHR	Where soft landscaping exists on the site, reduce potable water use for irrigation by 60%		Landscape Plan# Other Plan #  Declaration template

### Light Pollution Reduction (CORE)

Development Feature	Performance Measure (See full standards and specifications for details and definitions)	Description What level of performance, and how is the performance measure being met?	Documentation required for third party certification (Issued for Construction)
Lighting EC 5.2 MHR	Any architectural rooftop and façade lighting must be directed downwards and turned off between 11 pm and 6 am		Roof Plan# Lighting Plan# Declaration template
Lighting Controls EC 5.3 MHR	Non-residential uses install an automatic device to reduce outward spillage of internal light		Declaration template

## High Performance New Construction

### Solid Waste Reduction (CORE)

Development Feature	Performance Measure (See full standards and specifications for details and definitions)	Description What level of performance, and how is the performance measure being met?	Documentation required for third party certification (Issued for Construction)
Household Hazardous Waste SW 1.6 MHR	Residential uses only provide a dedicated collection area or room for HHW and/or electronic waste		Floor Plan # Other Plan #
Construction Waste SW 3.1 LR SW 3.2 MHR	Divert at least 75% of total construction and demolition materials		Declaration template

## High Performance New Construction

### TIER 2: Optional (Select and complete three (3) additional performance measures for Tier 2 developments)

MHR- Mid-High Rise residential & Non-residential standard; LR- Low Rise Residential Standard

Development Feature	Performance Measure (See full standards and specifications for details and definitions)	Description What level of performance, and how is the performance measure being met?	Documentation required for third party certification (Issued for Construction)
Single Occupancy Vehicle (SOV) Trips AQ 1.4 MHR	Reduce SOV trips by at least 30% through a variety of multi-modal infrastructure strategies		Transportation Impact Study Declaration template
Electric Vehicles AQ 1.5 MHR	Design buildings to provide at least 25% of the parking spaces with electric vehicle supply equipment (EVSE)		Parking Plan # Declaration template
Bicycle Parking Rates AQ 2.5 MHR	Provide enhanced long term and short term bicycle parking rates		Parking Plan # Other Plan #
Public Bicycle Parking Spaces AQ 2.6 MHR	Within 500 m of a transit station, provide at least 10 publically accessible short term bicycle parking spaces		Site Plan # Other Plan #
Bike Share AQ 2.7 MHR	Provide a public bike share location at grade on the site or in the public boulevard		Site Plan # Other Plan #
On-Site Renewable Energy GHG 2.2 MHR GHG 2.3 LR	Design on-site renewable energy systems to supply a minimum of 5% of the building's total energy load from solar PV, solar thermal or wind, or 20% from geo-exchange		As-constructed Stage Energy Report Declaration template
Submetering GHG 4.4 MHR	Install thermal energy meters for each heating and cooling appliance in all residential units or for each tenant in multi-tenant commercial buildings		Construction specifications

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Development Feature	Performance Measure (See full standards and specifications for details and definitions)	Description What level of performance, and how is the performance measure being met?	Documentation required for third party certification (Issued for Construction)
Refuge Area and back-up Generation GHG 5.2 MHR	Provide a refuge area in the building and 72 hours of back-up power to support critical functions during an emergency		Floor Plan # Other Plan # Declaration template
Tree Planting in Parking Lots EC 1.5 LR; MHR	Plant large growing shade trees at a minimum ratio of one (1) tree planted every three (3) parking spaces		Landscape Plan # Other Plan#
Tree Planting and Soil Volume EC 1.6 LR; MHR	Provide 25% more soil volume than required for Tier 1 compliance		Landscape Plan # Other Plan #
Tree Protection during Construction EC 1.7 LR; MHR	Provide double the minimum tree protection zones for existing trees		Landscape Details # Other Plan #
Restoration of Biodiversity and Pollinator Habitat EC 3.3 LR; MHR	Restore or protect at least 30% of the site with native vegetation and pollinator species		Landscape Plan # Other Plan # Plant lists
Biodiverse Green Roofs EC 3.4 LR; MHR	Provide a minimum of 50% of the Available Roof Space to support pollinator species		Roof Plan # Plant lists
Bird Friendly Glazing EC 4.3 LR EC 4.4 MHR	Treat at least 95% of all exterior glazing within the first 12 m above grade		Building Elevation Plans #  Elevation Details

## High Performance New Construction

Development Feature	Performance Measure (See full standards and specifications for details and definitions)	Description What level of performance, and how is the performance measure being met?	Documentation required for third party certification (Issued for Construction)
In-suite Waste Storage Space SW 1.5 MHR	Provide cabinet space in kitchen suites for segregated collection		Floor Plan # Garage Plan #
Building Lifecycle Impact SW 2.1 MHR	Reuse or salvage building materials		Declaration template
Sustainable Building Materials SW 4.1 all uses	Ensure that at least 25%, by cost, of the total value of permanently installed building products meet the criteria for materials reuse or recycled content		Declaration template

### **TIER 3: Core (Select and complete three (3) performance measures for Tier 3 developments)**

MHR- Mid-High Rise Residential & Non-residential Standard; LR- Low Rise Residential Standard

### **Energy Efficiency, Greenhouse Gas Emissions (CORE)**

#### **Mid-High Rise Residential & Non-Residential**

Development Feature	Performance Measure (See full standards and specifications for details and definitions)	Description What level of performance, and how is the performance measure being met?	Documentation required for third party certification (Issued for Construction)
Energy Performance GHG 1.3 MHR	Design the building to achieve Tier 3 TEUI, TEDI and GHGI targets by building type (required) OR target the CaGBC Zero Carbon Building Standard (ZCBS)		As-constructed Stage Energy Report Registration in ZCBS and proof of certification



## High Performance New Construction

### Energy Efficiency, Greenhouse Gas Emissions (CORE)

#### Low Rise Housing

Development Feature	Performance Measure (See full standards and specifications for details and definitions)	Description What level of performance, and how is the performance measure being met?	Documentation required for third party certification (Issued for Construction)
Buildings Energy Performance GHG 1.4 LR	Design, construct the building to be Net Zero ready in accordance with the CHBA Net Zero Home Labeling Program		CHBA Net Zero Service organization, Energy Evaluator agreement

### Water Balance, Quality & Efficiency (CORE)

Development Feature	Performance Measure (See full standards and specifications for details and definitions)	Description What level of performance, and how is the performance measure being met?	Documentation required for third party certification (Issued for Construction)
Stormwater Retention & Reuse WQ 2.2 all uses	Retain runoff generated from a minimum of 25 mm depth of rainfall		Stormwater Report Landscape Plan# Other Plan#
Water Efficient Fixtures WQ 4.4 LR; MHR	Install water fixtures that achieve at least a 50% reduction in potable water consumption for the building (not including irrigation)		Declaration template

### Solid Waste Reduction (CORE)

Development Feature	Performance Measure (See full standards and specifications for details and definitions)	Description What level of performance, and how is the performance measure being met?	Documentation required for third party certification (Issued for Construction)
Construction Waste SW 3.2 LR; MHR	Divert at least 95% (Tier 3) of total construction and demolition materials		Declaration template

## High Performance New Construction

### TIER 4: Core (Select and complete the performance measure for Tier 4 developments)

MHR- Mid-High Rise Residential & Non-residential Standard; LR- Low Rise Residential Standard

#### Energy Efficiency, Greenhouse Gas Emissions & Resilience (CORE) Mid-High Rise Residential & Non-Residential

Development Feature	Performance Measure (See full standards and specifications for details and definitions)	Description What level of performance, and how is the performance measure being met?	Documentation required for third party certification (Issued for Construction)
Energy Performance GHG 1.3 MHR	Design the building to achieve Tier 4 TEUI, TEDI and GHGI targets by building type (required) OR target the Passive House Standard		As-constructed Stage Energy Report Passive House registration & proof of certification

#### Energy Efficiency, Greenhouse Gas Emissions & Resilience (CORE) Low Rise Housing

Development Feature	Performance Measure (See full standards and specifications for details and definitions)	Description What level of performance, and how is the performance measure being met?	Documentation required for third party certification (Issued for Construction)
Buildings Energy Performance GHG 1.4 LR	Design and construct the building in accordance with the CHBA Net Zero Home Labeling Program or the Passive House Standard		CHBA Net Zero Service organization, Energy Evaluator agreement Passive House registration & proof of certification