

# City of Mississauga Green Development Standard

## Resilience Planning Checklist

Project Information	
Site Plan Application Number:	
Building Archetype:	
Project Location/Address:	
Project Description:	

### BUILDING RESILIENCE

Building resilience is defined as the ability of a structure and/or component to withstand unexpected events and minimize loss of functionality and recovery time without being damaged to an extent that is disproportionate to the intensity of the event.

Applicant's are required to complete the Resilience Planning Checklist to satisfy **R2: Refuge and Back-up Power Generation** requirements of the Green Development Standard. The checklist summarizes the proposed design features to improve a building's ability to withstand climate change, extreme weather events and other disruptive hazards.

### COMPLETING THE CHECKLIST

As extreme weather events increase in frequency and intensify, without proper preparation there could be impacts on business/tenant/occupant operations, insurance premiums, property loss, operational costs, marketability and property value.<sup>1</sup> The objective of the checklist is to identify the design measures to mitigate potential risks to occupants, the building and the surrounding environment.

When completing the checklist and responses, consider other performance requirements of the Green Development Standard including: **EB1: Energy Performance, R1: Emissions Free Energy and Storage, NS1: Heat Island Effect, NS3: Climate Resilient Landscapes, and NS4: Sustainable Roofs.**

<sup>1</sup> ULI Developing Resilience Toolkit, Protecting Building and Sites

### Thermal Resilience and Safety

What design measures have been taken to reduce the impacts of heat waves and other extreme weather events? Consider high-performance exteriors (thermal autonomy), sun shades, durable materials, cool roofs, high-albedo paving, etc.

### On-site Flood Mitigation

What flood prevention measures have been implemented to mitigate the impact of heavy rainfall events and the associated risk of flooding within the development? Consider a green roof, blue roof, permeable pavers, landscape buffers, etc.

**Managing Power Outages**

What design measures have been implemented to ensure tenant / occupant comfort in the event of a power outage? Describe temporary and/or alternative power generation source(s). Refer to R2: Refuge and Back-up Power Generation’ metric, in addition to, ‘EB1: Energy Performance’ and ‘R1: Emissions Free Energy and Storage.

**Building Durability and Functionality**

What design measures, including durable building materials, have been implemented to withstand extreme weather events? Refer to CSA S478-95 (2024) a framework for building durability.

Manager and Tenant Preparedness

The building management has been made aware of the types of climate-resilient strategies used in the building.

The building management is aware of the location of the preparedness kit.

What additional emergency preparedness strategies have been made available to building managers, operators and/or tenants?