

# Climate Change Resiliency Checklist

For Measure 3.3 of the Town of Halton Hills's Green Development Standard v3

Development Name and Address:

\_\_\_\_\_

Date: \_\_\_\_\_

This checklist is to be completed by the applicant, in collaboration with the applicant's design and consulting team, in order to be considered for 1 point under Measure 3.3 Resiliency Checklist from Town of Halton Hill's Green Development Standard v3.

The applicant is expected to complete this document in a collaborative and integrative manner with the design and consulting team. The primary intent of this exercise is to ensure that a resiliency discussion is had amongst the team. It is further hoped that those discussions then lead to resiliency strategies incorporated into the design, and therefore making the development better equipped to withstand and respond to the impacts of climate change and extreme weather events.

## Focused Discussion

<p>1. Has there been a designated meeting to discuss climate change resiliency strategies for the development?</p>	<p><input type="checkbox"/> Yes</p> <p>Date(s):</p> <p>Duration(s):</p> <p>Facilitated by:</p> <p>Parties Involved:</p>	<p><input type="checkbox"/> No</p>
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## Extreme Temperatures

<p>2. Confirm the annual climatic dry bulb design temperatures that will be used for the project, along with the percentiles that those temperatures represent.</p>	<p>Heating DB: _____ °C   percentile: _____ %</p> <p>Cooling DB: _____ °C   percentile: _____ %</p>
<p>3. Check the boxes of any applicable measures being taken to reduce the impacts of extreme temperatures.</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Typical wall performance is better than prescriptive OBC</li> <li><input type="checkbox"/> Typical roof performance better than prescriptive OBC</li> <li><input type="checkbox"/> Typical glazing performance better than OBC</li> <li><input type="checkbox"/> Targeted building air tightness better than code</li> <li><input type="checkbox"/> Passive survivability assessed using energy model</li> <li><input type="checkbox"/> Operable windows in all regularly occupied areas</li> <li><input type="checkbox"/> Green roof</li> <li><input type="checkbox"/> High-albedo roof</li> <li><input type="checkbox"/> Air conditioning in all regularly occupied spaces</li> <li><input type="checkbox"/> Refuge area with air conditioning</li> <li><input type="checkbox"/> High-albedo sidewalks, walkways and patios</li> <li><input type="checkbox"/> High-albedo driveways and roads</li> <li><input type="checkbox"/> &gt;30% shading of paved surfaces within 10 years</li> </ul> <p>Others:</p>

## Flood Mitigation

<p>4. Is development located within a known flood plain, or an area known to be vulnerable to flooding?</p>	<p><input type="checkbox"/> Yes</p> <p>Year(s) of last known event(s) that may have flooded site:</p>	<p><input type="checkbox"/> No</p>
<p>5. Confirm project design variables that have been carried to mitigate extreme flooding events.</p>	<p>Daily rainfall max and duration designed to: _____ mm for _____ hours</p> <p>Anticipated frequency of events occurring that will exceed the above: once every _____ year(s)</p> <p>Additional commentary:</p>	
<p>6. Check the boxes of any applicable measures taken to reduce the site's vulnerability to flooding.</p>	<p><input type="checkbox"/> Limited hardscape</p> <p><input type="checkbox"/> Oversized on-site stormwater storage</p> <p><input type="checkbox"/> HVAC and electrical located above grade</p> <p><input type="checkbox"/> Backup power systems located above grade</p> <p><input type="checkbox"/> Ground floor electrical circuits located in ceiling</p> <p><input type="checkbox"/> Wastewater back flow preventer</p> <p><input type="checkbox"/> Stormwater back flow preventer</p> <p>Others:</p>	

## Backup Power

<p>7. Check the boxes of any on-site systems planned to reduce the development's reliance on the grid.</p>	<p> <input type="checkbox"/> Solar photovoltaics  <input type="checkbox"/> Solar thermal  <input type="checkbox"/> Battery storage  <input type="checkbox"/> District energy  <input type="checkbox"/> Combined heat and power system  <input type="checkbox"/> Ground source heat pump / geothermal         </p> <p>Others:</p>	
<p>8. Will the development have back-up power / an emergency generator?</p>	<p> <input type="checkbox"/> Yes            Type(s): _____            Backup Power (kW): _____            Energy Capacity (kWh): _____         </p>	<p> <input type="checkbox"/> No         </p>
<p>Backup power will serve the following:</p> <p> <input type="checkbox"/> All space heating                      <input type="checkbox"/> Some space heating  <input type="checkbox"/> All space cooling                        <input type="checkbox"/> Some space cooling  <input type="checkbox"/> All DHW heating                         <input type="checkbox"/> Some DHW heating  <input type="checkbox"/> All receptacles                            <input type="checkbox"/> Some receptacles  <input type="checkbox"/> All lighting                                 <input type="checkbox"/> Emergency lighting         </p> <p> <input type="checkbox"/> Sump pumps  <input type="checkbox"/> Water booster pumps  <input type="checkbox"/> Security systems         </p> <p>Others:</p>		

## Summary

Provide a brief narrative summarizing the development's approach to resiliency.

The following parties have contributed to this completed resiliency checklist:

Owner/Applicant

Print Name:

Title:

Signature:

Architectural Designer:

Print Name:

Title:

Signature:

Mechanical Designer

Print Name:

Title:

Signature:

<p>Electrical Designer Print Name:</p> <p>Title:</p> <p>Signature:</p>
<p>Civil Engineer Print Name:</p> <p>Title:</p> <p>Signature:</p>
<p>Landscape Architect Print Name:</p> <p>Title:</p> <p>Signature:</p>
<p>Other: Print Name:</p> <p>Title</p> <p>Signature:</p>
<p>Other: Print Name:</p> <p>Title</p> <p>Signature:</p>