Energy Efficiency Design Summary (for Part 3 Buildings)

Applications Between Jan. 1, 2017 and Dec. 31, 2017

Project Address: _____ Application Number: _____

This form and documentation summarized in the table below must be submitted with the permit application for new Part 3 buildings and additions submitted **between January 1, 2017 and December 31, 2017.** All forms are to be completed and signed by the individual(s) who reviews and takes responsibility for the energy efficiency aspects of this project. **All permit applications submitted after December 31, 2017 must instead use the corresponding EEDS form**.

Select Path[1]	Compliance Path Description	Required Documentation[2]	Submission Format[3]
-	Applies to all projects	❑ Air barrier section and detail drawings	Electronic
		❑ MMA "Project Information" form ❑ Heat loss / gain calculations ❑ Ventilation rate calculations ❑ Interior & exterior lighting power density calculations	Electronic
A-1 ❑	Exceed by not less than 35% the energy efficiency levels attained by conforming to the 1997 MNECB	❑ MMA "Form A" ❑ MNECB Mandatory Requirement Checklist ❑ Energy simulation output report including: a. Summary of design inputs b. Annual energy consumption summary for proposed and reference buildings ❑ CO_2e emission calculations[4] ❑ Peak electric demand calculations[7]	Electronic
A-2 ❑	Exceed by not less than 17.5% the energy efficiency levels attained by conforming to the ASHRAE 90.1-2010	❑ MMA "Form A" ❑ ASHRAE 90.1 Mandatory Provision Checklists: MMA Form 5.4 MMA Form 8.4 MMA Form 6.4 MMA Form 9.4 MMA Form 7.4 MMA Form 9.5 ❑ Energy simulation output report including: a. Summary of design inputs b. Annual energy consumption summary for proposed and reference buildings ❑ CO_2e emission calculations[5] ❑ Peak electric demand calculations[7]	Electronic
B[8] ❑	Achieve the energy efficiency levels attained by conforming to ASHRAE 90.1-2010 and Chapter 2 in Division 3 of SB-10	❑ MMA "Form B" ❑ All forms listed on MMA "Form B"	Electronic
C ❑	Exceed by not less than 13% the energy efficiency levels attained by conforming to the 2011 NECB and Chapter 3 in Division 2 of SB-10	❑ NECB forms ❑ Energy simulation output report including: a. Summary of design inputs b. Annual energy consumption summary for proposed and reference buildings ❑ CO_2e emission calculations[6] ❑ Peak electric demand calculations[7]	Electronic

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If the building is exempt from the energy efficiency requirements of Part 12 and MMAH Supplementary Standard SB-10, please describe the reason and provide the relevant Ontario Building Code reference (see document "Buildings Exempt from Compliance with Supplementary Standard SB-10"):

Notes:

1. Part 12 and MMAH Supplementary Standard SB-10 (September 14, 2012) outline the compliance path options for Part 3 buildings.
2. Copies of MMA forms and NECB forms have been updated to reflect SB-10 requirements after December 31, 2016 and can be obtained by request submitted to patrick.andres@guelph.ca or can be downloaded from the City of Guelph website: http://guelph.ca/building

   MNECB Checklist can be obtained directly from the Natural Resources Canada (NRCan) website: http://www.nrcan.gc.ca/sites/oee.nrcan.gc.ca/files/pdf/commercial/newbuildings/docs/D-mnecb-checklist-20071218.pdf
3. All documents must include the permit application number and project address. Electronic copies of documentation must be submitted to patrick.andres@guelph.ca at the time of initial permit application. Please provide files as PDFs.
4. Calculations must demonstrate that the annual CO_2e emission level will be reduced by at least 35% from the level established by 1997 MNECB using the emission factors listed in Division 2, 1.1.2.2.(1) of MMAH Supplementary Standard SB-10.
5. Calculations must demonstrate that the annual CO_2e emission level will be reduced by at least 17.5% from the level established by ASHRAE 90.1-2010 using the emission factors listed in Division 2, 1.1.2.2.(1) of MMAH Supplementary Standard SB-10.
6. Demonstrate that the annual CO_2e emission level will be reduced by at least 13% from the level established by Parts 1 to 7 of the 2011 NECB and Chapter 3 of Division 2, using the emission factors listed in Division 2, 1.1.2.2.(1) of MMAH Supplementary Standard SB-10.
7. Refer to MMAH Supplementary Standard SB-10, Division 3, 1.1.2.3. Calculations must demonstrate peak electric demand of building does not exceed levels established by 1.1.2.3.(1),

   OR

   Demonstrate that the prescriptive requirements set in 1.1.2.3.(2) have been met for energy efficiency of cooling equipment, fan power limitations for cooling and ventilation systems, and interior lighting power density.
8. Annual CO_2e emission and peak electrical demand requirements for path B are deemed to be satisfied if the prescriptive requirements set in 1.1.2.2.(2) and 1.1.2.3.(2) are met. If another option is used (e.g. Energy Cost Budget Method), calculations for annual CO_2e emission and peak electrical demand must be submitted.