

Energy Efficiency Design Summary (for Part 3 buildings)



Project Address: _____

Application number: _____

Designer's Name: _____

Designer's Signature: _____

This form and the documentation summarized in the table below must be submitted with the permit application for **all new Part 3 buildings and additions**. 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.

Table 1: required documentation

| Select path ¹ | Compliance path description | Required documentation ² | Submission format ³ |
|--------------------------|-----------------------------|---|--------------------------------|
| N/A | Applies to all projects | Air barrier section and detail drawings Heat loss/gain calculations Ventilation rate calculations | Electronic |

¹ Part 12 and MMA Supplementary Standard SB-10 (December 22, 2016) outline the compliance path options for Part 3 building permit applications.

² The MMA SB-10 compliance checklist forms are available for download from [Build Right Ontario](#).

³ All documents must include the permit application number and project address. Electronic copies of documentation must be uploaded using the Building Services [online portal](#) at the time of initial permit application. Please provide files as PDFs.

| Select path ¹ | Compliance path description | Required documentation ² | Submission format ³ |
|--------------------------|--|--|--------------------------------|
| A | Exceed by not less than 17.5% the energy efficiency levels attained by conforming to the ASHRAE 90.1-2010 per 12.2.1.2.(2)(a) and Division 1 of SB-10 1.1.2.1.(1)(b) | MMA "Form A" ASHRAE 90.1 mandatory provision checklists: <ul style="list-style-type: none"> • MMA forms 5.4 & 5.5 • MMA forms 6.4 • MMA form 7.4 • MMA form 8.4 • MMA form 9.4 • MMA form 10.4 Energy simulation output report including: <ul style="list-style-type: none"> a) Summary of design inputs b) Annual energy consumption summary for proposed and reference buildings CO ₂ e emission calculations ⁴ Peak electric demand calculations ⁵ | Electronic |

⁴ Annual CO₂e emission requirements for paths B, C-2 and D are deemed to be satisfied if the **prescriptive** requirements set in 1.1.2.2.(2), (3), or (4) are met. If energy efficiency compliance is demonstrated using A-2, C-1, either the Energy Cost Budget Method of ASHRAE 90.1- 2013 or the Building Energy Performance Compliance Path of the 2015 NECB, calculations for annual CO₂e emissions must be determined in accordance with good engineering practice and using the CO₂e emission factors listed in Division 3, 1.1.2.2 of MMAH Supplementary Standard SB-10.

⁵ Peak electrical demand requirements for paths B, C-2 and D are deemed to be satisfied if the **prescriptive** requirements set in 1.1.2.3.(1), (2), or (3) are met. If energy efficiency compliance is demonstrated using A-2, C-1, either the Energy Cost Budget Method of ASHRAE 90.1- 2013 or the Building Energy Performance Compliance Path of the 2015 NECB, peak electrical demand must be calculated and shall not exceed the peak electric demand of the corresponding budget or reference building, or; Demonstrate that the **prescriptive** requirements set in 1.1.2.1 have been met for energy efficiency of cooling equipment, fan power limitations for cooling and ventilation systems, and interior lighting power density, where the building's peak electric demand happens in summer or the space and water heating equipment, fans, pumps and interior lighting power density, where the building's peak electric demand happens in winter.

| Select path ¹ | Compliance path description | Required documentation ² | Submission format ³ |
|--------------------------|--|--|--------------------------------|
| B | Achieve the energy efficiency levels attained by conforming to ASHRAE 90.1-2013 and Chapter 2 in Division 3 of SB-10 | Project Information form ASHRAE 90.1-2013 mandatory checklists: <ul style="list-style-type: none"> • MMA forms 5.4 & 5.5 • MMA form 6.4 & 6.5 • MMA form 7.4 • MMA form 8.4 • MMA form 9.4 • MMA form 9.5 • MMA form 10.4 CO ₂ e emission calculations Peak electric demand calculations | Electronic |
| C-1 | 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 per 12.2.1.2.(2)(a) and Division 1 of SB-10 1.1.2.1.(1)(d) | NECB forms Energy simulation output report including: <ol style="list-style-type: none"> a) Summary of design inputs b) Annual energy consumption summary for proposed and reference buildings CO ₂ e emission calculations Peak electric demand calculations | Electronic |
| C-2 | Achieve the energy efficiency levels attained by conforming to the 2015 NECB and Chapter 3 in Division 3 of SB-10 | Project Information form 2015 NECB forms CO ₂ e emission calculations Peak electric demand calculations | Electronic |
| D | Achieve the energy efficiency levels attained by conforming to Section 7 of ASHRAE 189.1-2014, excluding Sections 7.2.b, 7.4.7.3, 7.4.8, & 7.5 | Project Information form All relevant MMA forms CO ₂ e emission calculations Peak electric demand calculations | Electronic |

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"):

Collection of Personal Information

Personal information is being collected and will be used for the purposes of confirming Ontario Building Code requirements have been met and to communicate with designer.

Personal information contained in this form and schedules is collected under the authority of subsection 8(1.1) of the Building Code Act, 1992, and will be used in the administration and enforcement of the Building Code Act, 1992.

If you have questions about the collection, use or disclosure of this personal information please call 519.822.1260 extension 2349 or email privacy@guelph.ca.

Alternate formats of this document are available as per the Accessibility for Ontarians with Disabilities Act by contacting Building Services at 519-837-5615 or email building@guelph.ca.