Planning and Development Services
Building Division
8850 McLaughlin Road, Unit 1
Brampton, ON L6Y 5T1

Building Permit Requirements

New Industrial, Commercial or Institutional Projects or High-Rise Residential Buildings

Building Permit Application

The following is required at submission. Incomplete applications **cannot** be accepted.

1. **COMPLETED APPLICATION FORMS.**
   - Application for a Permit to Construct or Demolish
   - Schedule 1: Designer Information
   - Applicable Law Checklist
   - General Review Commitment Certificate
   - Detailed Letter of Use describing the nature of the operation or business, the number of employees and the occupant load. Industrial storage or manufacturing uses shall include a detailed description of the processes and materials or chemicals used or stored and the method of storage
   - Completed Financial Contribution Form (provided by Building Division or available on the website www.brampton.ca)

2. **PLANS AND SPECIFICATIONS**
   - Legal Property Survey
   - 2 sets of site plan approved drawings. Building Permit Applications will not be accepted without site plan approval
   - 2 complete sets of drawings – architectural, structural, HVAC, plumbing, electrical (sprinkler system complete with hydraulic calculations and fire alarm system, where applicable)
   - 2 copies of BMEC authorization (where applicable)
   - 1 copy of HVAC calculations
   - 1 copy of soil engineer's report
   - 2 sets of specifications (where applicable)
   - 1 copy of Supplementary Standard SB-10 forms (where applicable)
   - 1 copy of Proposal for Alternative Solution (where applicable)

3. **BUILDING PERMIT FEE**
   - The building permit fee is based on the service index for the classification of the work proposed and the floor area in m^2 of the work involved
   - (Fee = Service Index X Area)
   - Refer to Building By-law 387-2006 as amended for Fee Schedule

Building Permit Issuance

The following items must be completed prior to issuance of a building permit:

1. Outstanding balance of permit fees is due and payable at the time of permit issuance. The applicant will be contacted upon completion of the plans review and advised of permit fees and any outstanding issues.

2. Provide proof of other statutory requirements (applicable law) where it applies in accordance with O.B.C. Div A, 1.4.1.3 for example;
   - Finance Department – payment of development charges and parkland contribution
   - Conservation Authority – permit from Toronto Region Conservation Authority or Credit Valley Conservation Authority
   - Ministry of Transportation – land use or building permit
   - Proof of Filing of Record of Site Conditions
   - Proposal for Alternative Solution requires a deposit of $380.50 at time of application plus $86.50 per hour review time.

3. Where a permit is to be issued for construction within a common element of a registered condominium a Notice of Permission to Construct form, signed by an authorized agent of the condominium corporation, shall be submitted for the authorization of work to be undertaken within the common element of the building or property.

4. Residential buildings intended for condominium registration must be registered with TARION and have an Ontario New Home Warranty program reference number.

Other Telephone Numbers

Credit Valley Conservation Authority	1-800-668-5557
Toronto and Region Conservation Authority	(416) 661-6600

Permits
Tel. 905-874-2401
Fax 905-874-2499

Inspections
Tel. 905-874-3700
Fax 905-874-3763

Zoning Services
Tel. 905-874-2090
Fax 905-874-2499

Revised: Jan. 2020

Application for a Permit to Construct or Demolish

This form is authorized under subsection 8(1.1) of the *Building Code Act, 1992.*

For use by Principal Authority	
Application number:	Permit number (if different):
Date received:	Roll number:

Application submitted to: **THE CORPORATION OF THE CITY OF BRAMPTON**
(Name of municipality, upper-tier municipality, board of health or conservation authority)

A. Project information

Building number, street name			Unit number	Lot/con.
Municipality	Postal code	Plan number/other description		
Project value est. $		Area of work (m^2)		

B. Purpose of application

❑ New construction ❑ Addition to an existing building ❑ Alteration/repair ❑ Demolition ❑ Conditional Permit

Proposed use of building	Current use of building
Description of proposed work	

C. Applicant

Applicant is: ❑ Owner or ❑ Authorized agent of owner

Last name	First name	Corporation or partnership		
Street address			Unit number	Lot/con.
Municipality	Postal code	Province	E-mail	
Telephone number ( )	Fax ( )		Cell number ( )	

D. Owner (if different from applicant)

Last name	First name	Corporation or partnership		
Street address			Unit number	Lot/con.
Municipality	Postal code	Province	E-mail	
Telephone number ( )	Fax ( )		Cell number ( )	

E. Builder (optional)

Last name	First name	Corporation or partnership (if applicable)	
Street address		Unit number	Lot/con.
Municipality	Postal code	Province	E-mail
Telephone number ( )	Fax ( )	Cell number ( )	

F. Tarion Warranty Corporation (Ontario New Home Warranty Program)

i. Is proposed construction for a new home as defined in the *Ontario New Home Warranties Plan Act*? If no, go to section G.	❑ Yes	❑ No
ii. Is registration required under the *Ontario New Home Warranties Plan Act*?	❑ Yes	❑ No

iii. If yes to (ii) provide registration number(s): _____

G. Required Schedules

i) Attach Schedule 1 for each individual who reviews and takes responsibility for design activities.

ii) Attach Schedule 2 where application is to construct on-site, install or repair a sewage system.

H. Completeness and compliance with applicable law

i) This application meets all the requirements of clauses 1.3.1.3 (5) (a) to (d) of Division C of the Building Code (the application is made in the correct form and by the owner or authorized agent, all applicable fields have been completed on the application and required schedules, and all required schedules are submitted).	❑ Yes	❑ No
Payment has been made of all fees that are required, under the applicable by-law, resolution or regulation made under clause 7(1)(c) of the *Building Code Act, I992*, to be paid when the application is made.	❑ Yes	❑ No
ii) This application is accompanied by the plans and specifications prescribed by the applicable by-law, resolution or regulation made under clause 7(1)(b) of the *Building Code Act, 1992.*	❑ Yes	❑ No
iii) This application is accompanied by the information and documents prescribed by the applicable by-law, resolution or regulation made under clause 7(1)(b) of the *Building Code Act, 1992* which enable the chief building official to determine whether the proposed building, construction or demolition will contravene any applicable law.	❑ Yes	❑ No
iv) The proposed building, construction or demolition will not contravene any applicable law.	❑ Yes	❑ No

I. Declaration of applicant

I _____ declare that:
(print name)

1. The information contained in this application, attached schedules, attached plans and specifications, and other attached documentation is true to the best of my knowledge.
2. If the owner is a corporation or partnership, I have the authority to bind the corporation or partnership.

_____ _____
Date Signature of applicant

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*. Questions about the collection of personal information may be addressed to: a) the Chief Building Official of the municipality or upper-tier municipality to which this application is being made, or, b) the inspector having the powers and duties of a chief building official in relation to sewage systems or plumbing for an upper-tier municipality, board of health or conservation authority to whom this application is made, or, c) Director, Building and Development Branch, Ministry of Municipal Affairs and Housing 777 Bay St., 2nd Floor. Toronto, M5G 2E5 (416) 585-6666.

Schedule 1: Designer Information

Use one form for each individual who reviews and takes responsibility for design activities with respect to the project.

A. Project Information

Building number, street name			Unit no.	Lot/con.
Municipality	Postal code	Plan number/ other description		

B. Individual who reviews and takes responsibility for design activities

Name		Firm		
Street address			Unit no.	Lot/con.
Municipality	Postal code	Province	E-mail	
Telephone number ( )	Fax number ( )		Cell number ( )	

C. Design activities undertaken by individual identified in Section B. [Building Code Table 3.5.2.1. of Division C]

❑ House	❑ HVAC – House	❑ Building Structural
❑ Small Buildings	❑ Building Services	❑ Plumbing – House
❑ Large Buildings	❑ Detection, Lighting and Power	❑ Plumbing – All Buildings
❑ Complex Buildings	❑ Fire Protection	❑ On-site Sewage Systems

Description of designer's work

D. Declaration of Designer

I _____ declare that (choose one as appropriate):

(print name)

❑ I review and take responsibility for the design work on behalf of a firm registered under subsection 3.2.4.of Division C, of the Building Code. I am qualified, and the firm is registered, in the appropriate classes/categories.

Individual BCIN: _____

Firm BCIN: _____

❑ I review and take responsibility for the design and am qualified in the appropriate category as an "other designer" under subsection 3.2.5.of Division C, of the Building Code.

Individual BCIN: _____

Basis for exemption from registration: _____

❑ The design work is exempt from the registration and qualification requirements of the Building Code.

Basis for exemption from registration and qualification: _____

I certify that:

1. The information contained in this schedule is true to the best of my knowledge.
2. I have submitted this application with the knowledge and consent of the firm.

_____ _____

Date Signature of Designer

NOTE:

1. For the purposes of this form, "individual" means the "person" referred to in Clause 3.2.4.7(1) (c).of Division C, Article 3.2.5.1. of Division C, and all other persons who are exempt from qualification under Subsections 3.2.4. and 3.2.5. of Division C.
2. Schedule 1 is not required to be completed by a holder of a license, temporary license, or a certificate of practice, issued by the Ontario Association of Architects. Schedule 1 is also not required to be completed by a holder of a license to practise, a limited license to practise, or a certificate of authorization, issued by the Association of Professional Engineers of Ontario.

CITY OF BRAMPTON - BUILDING DIVISION

SECTION Gί. DOCUMENTS ESTABLISHING COMPLIANCE WITH APPLICABLE LAW (OBC Div. A - 1.4.1.3.)

Permit Application No.	Project Location
_____	_____ # _____ street _____ unit/suite

Explanation:
Applicable Law - Applicable law is other regulations for which approval must be obtained before a building permit can issue. A complete list of Acts and Regulations that are "Applicable Law" is set out in Article 1.4.1.3 of Division A of the Ontario Building Code.

Instructions:
The most common Acts and Regulations are listed below with the documentation that must be provided before a building permit can issue. Check those that apply to your permit application and complete the declaration. The customer service plans examiner will assist you with any questions you may have about the regulations listed. The documents noted must be provided before a building permit can issue.

Details and Contact Information
A list of agencies and contact information is available at the Building Division or on the City of Brampton website.

APPLICABLE LAWS (Note: This list provides only the most common approvals)

ACT	Description	REQUIRED DOCUMENTS (Provide copy)	Required Yes/No	Received
Planning Act s.41	(Site Plan Control)	Site plan approved drawings		
Planning Act s.34	(Zoning By-law)	Final & binding amendment		
Planning Act Pt. V1	(Division of Land)	Registered Plan or Deed		
Planning Act s.45	(Minor Variance)	Final Decision from City Clerk		
Planning Act s.33	(Demolition of Residential Property)	Council Approval		
Ontario Heritage Act ss.27 (3), 30(2), 33, ss.34.40.1 & 40.2		Heritage Permit		
Ontario Heritage Act s.34.5 and s. 34.7.(2)		Ministry of Culture approval		
Development Charges Act s.28 and s.53, Education Act s.257.83 & 257.93	(Financial Contribution)	Confirmation of payment from City of Brampton Finance Department		
Planning Act s.42(6)	(Cash in Lieu of Parkland)	Confirmation of payment from City of Brampton Finance Department		
Conservation Authorities Act	(Flood plain or fill regulated area)	Construction and Fill Permit		
Child Care & Early Years Act, 2014, S.). 2014, c.11 Sched. 1,0. Reg. 137/15 s.13 & 25	(Daycare centre with more than 5 children)	Approval from Ministry of Children and Youth Services		
Education Act s.194	(Demolition of all or part of a school)	Approval from Ministry of Education		
Environmental Protection Act s.168.3.1 & 168.6(1) change of use of land	(Industrial or commercial to agricultural, residential or park)	File Record of Site Condition (RSC) and/or provide Certification of Property use (CPU)		
Public Transportation Act s.34 and s. 38 10	(Construction within 45m of the road or within 395m of an intersection of Hwys, 410 or 407)	Building and Land Use Permit issued by MTO		
Other:				

APPLICANT'S DECLARATION

I, _____ certify that the applicable laws designated on the above noted chart are, to the best of my
(print name)
knowledge, all of the "applicable law" for which this application for a permit must comply before a permit is issued.

_____ Date _____ Signature

FOR OFFICE USE ONLY

FLOWER CITY BRAMPTON.CA
Building Division
8850 McLaughlin Rd.
Brampton
building.inquiries@brampton.ca
Fax. (905) 874-2499

COMMITMENT TO PROVIDE GENERAL REVIEW

Pursuant to OBC DIVISION C - Part 1 Subsection 1.2.2.

PROJECT INFORMATION

PROJECT DESCRIPTION	
PROJECT LOCATION	_____ (#, Street, Unit/Suite)
PROPERTY OWNER	Name: _____ Address: _____ (#, Street, Unit/Suite, City) e-mail address: _____ If the Owner is a corporation provide the authorized corporate contact name and contact information: Name: _____ Address: _____ (#, Street, Unit/Suite, City) e-mail address: _____ Telephone: _____

COMMITMENT TO PROVIDE GENERAL REVIEW

Consultant Name: _____

Company: _____

Address: _____
(#, Street, Unit/suite, City, Postal Code)

e-mail address: _____ Telephone : (___) _____ Fax: (___) _____

1. The undersigned architect or professional engineer warrants that I have been retained by the Owner and/or authorized agent named on this document to provide general review of the construction of the building referenced to determine whether the construction is in general conformity with the plans and other documents that form the basis for the issuance of a building permit, in accordance with the performance standards of the Ontario Association of Architects (OAA) and/or Professional Engineers of Ontario (PEO);
2. All general review reports by the architect or professional engineer will be forwarded promptly to the attention of the applicable Inspector at: inspections.scheduling@brampton.ca
3. Should I cease to provide general review for any reason during construction, the Chief Building Official will be notified in writing immediately.

Professional Discipline

☐ ARCHITECTURAL ☐ STRUCTURAL ☐ MECHANICAL HVAC ☐ MECHANICAL PLUMBING
☐ MECHANICAL- CIVIL ☐ ELECTRICAL ☐ SITE SERVICES ☐ OTHER (SPECIFY): _____

DESCRIBE THE SCOPE OF WORK FOR WHICH GENERAL REVIEW IS BEING PROVIDED

Signature: _____ Date: _____ (mth / day / year)

Print Name: _____

FOR OFFICE USE ONLY

PERMIT APPLICATION # _____

Review By: (Bldg) _____ BCIN# _____ Date: _____ (mth / day / year)

(Plmbg) _____ _____ _____ (mth / day / year)

(HVAC) _____ _____ _____ (mth / day / year)

City of Brampton

Flower City

brampton.ca

** New Building Form **

A SEPARATE FORM MUST BE FILLED IN FOR EACH USE IN A MIXED-USE BUILDING

Site Plan #

1 Property Location

Municipal Address: _____

Street Unit

Legal Description: _____

Lot/Block Plan Reference Plan Description

2 Property Owner: _____

Contact: Applicant/Agent: _____

Address: _____

Street Unit Town/City Postal Code

Telephone: _____ Fax: _____

3 Property Use Specific Intended Use : _____

OFFICE USE ONLY:

These definitions are applicable to how Development Charges are applied only and are contained within the Development Charges By-laws 218-2004 to 224-2004; please check off the building use(s) that are applicable to you.

The following definition applies to By-laws 218-2004, 221-2004 and 223-2004:

section.

The following definitions apply to By-law 224-2004:

"Non-Industrial/Non-Office Use" means the use of land, buildings or structures* or parts thereof, used, designed or intended to be used for any use other than for residential use or for industrial use, or fo office use, as those terms are defined below, and a non-industrial use includes a retail warehouse.

"Office Use" means the use of land, buildings or structures* used primarily for, or designed or intended for use primarily for or in connection with office or administrative purposes, provided that the building or structure has an office or administrative component equal to or greater than 50 percent of the total gross floor area of the building or structure. For the purposes of the Development Charges by-law, office excludes office or administrative uses located within a shopping centre or plaza, and excludes office or administrative uses where such uses are accessory to an industrial use.

"Industrial Use" means land, building or structures* used or designed or intended for use for or in connection with manufacturing, producing or processing of raw goods, storage and includes office uses and the sale of commodities to the general public where such uses are accessory to an industrial use, but does not include a building used exclusively for office or administrative purposes unless it is attached to an industrial building or structure as defined above and does not include a retail warehouse.

* " Buildings or Structures" means a structure occupying an area greater than 10 square metres consisting of a wall, roof, and floor or any of them or a structural system serving the function thereof, and includes an air-supported structure, mezzanine, and an exterior storage tank, but does not include: a farm building, or a canopy, or an exterior storage tank where such exterior storage constitutes an

4 Calculations - Applicable to the City of Brampton, the Region of Peel and School Board By-laws

(To be completed by applicant/agent)			Office Use - Checked by
A.	**"Total Floor Area"/"Gross Floor Area"** means the total of the areas of the floors in a building or structure, whether at, above or below grade measured between the exterior faces of the exterior walls of the building or structure or from the centre line of a common wall separating two uses, or from the outside edge of a floor where the outside edge of the floor does not meet an exterior or common wall. Where a building or structure does not have any walls, the total floor area shall be the sum total of the area of land directly beneath the roof of the building or structure and the total areas of the floors in the building or structure. Also includes: a) Floor area of a mezzanine and air supported structure and space occupied by interior walls and partitions. (City, Region and School Board By-laws). b) Below grade, only that floor area used for retail, commercial, office, industrial or warehousing purposes (Region and School Board By-laws).	sq.m.	
B.	**Deductible Area:**		
	B-1. Any part of the building or structure used for mechanical equipment related to the operation or maintenance of the building or structure, stairwells, elevators and washrooms	sq.m.	
	B-2. Any part of the building or structure above or below grade, used exclusively for the temporary parking of a motor vehicle or used for the provision of loading spaces	sq.m.	
	B-3. The area of any self contained structural shelf and rack storage facility approved by the Building Materials Commission	sq.m.	
	B-4. Parts of the building below established grade **other** than that used for retail, commercial, office, industrial, institutional or warehousing purposes.	sq.m.	
	B-5. Parts of the building below grade used for non-commercial parking	sq.m.	
	B-6. The portion of the building or structure owned by a church or religious organization which is used **only** as a place of worship	sq.m.	
C.	**Multiple Unit Residential Buildings (# of suites):**	<= 750 sq.ft.	
		> 750 sq.ft.	

I, hereby declare that I have verified this information and certify that the statements made herein are correct to the best of my knowledge.	Signature of Applicant:	Name (Please print):
		Date:

ONTARIO BUILDING CODE SUPPLEMENTARY STANDARD SB-10
PROJECT INFORMATION

Project:	Location:
Building Permit Application No.:	Date:

Architectural Designer Information*	Mechanical Designer Information*	Electrical Designer Information*
Name	Name	Name
Address	Address	Address
City Province	City Province	City Province
Signature Date(YY/MM/DD)	Signature Date(YY/MM/DD)	Signature Date(YY/MM/DD)

*IF MORE DESIGNERS ARE INVOLVED, PROVIDE ADDITIONAL COPIES OF THIS FORM.

THIS CHECKLIST IS A CONVENIENCE DOCUMENT ONLY AND IS BASED ON THE ENERGY EFFICIENCY REQUIREMENTS DESCRIBED IN THE ONTARIO BUILDING CODE SUPPLEMENTARY STANDARD SB-10 DIVISION 3. THIS CHECKLIST IS NOT A SUBSTITUTE FOR COMPLYING WITH THE REQUIREMENTS OF THE ONTARIO BUILDING CODE. WHILE CARE HAS BEEN TAKEN TO ENSURE ACCURACY OF THIS CHECKLIST, DESIGNERS AND BUILDING OFFICIALS MUST REFER TO THE ACTUAL WORDING AND REQUIREMENTS OF THE ONTARIO BUILDING CODE (O.REG. 350/06 AND AMENDMENTS UP TO AMENDING O.REG. 315/11).

THIS CHECKLIST IS MADE AVAILABLE FOR CODE USERS BY THE MINISTRY OF MUNICIPAL AFFAIRS AND HOUSING. USERS SHOULD ALWAYS CONSULT WITH THE AUTHORITY HAVING JURISDICTION, IF THE CHECKLIST IS GOING TO BE SUBMITTED TO THAT AUTHORITY. THE MINISTRY OF MUNICIPAL AFFAIRS AND HOUSING DOES NOT ASSUME RESPONSIBILITY FOR ERRORS OR OVERSIGHTS RESULTING FROM THE INFORMATION CONTAINED HEREIN.

PLEASE FILL IN THE ACTUAL VALUES INSTALLED AND CHECK BOXES AS THEY APPLY.

OBC SB-10 COMPLIANCE SUMMARY

Energy Efficiency Design:

There are three energy compliance options to meet the requirements of OBC SB-10 Division 3. Please select the compliance option selected for this project. The energy efficiency of all buildings must be designed to:

Compliance Path		Forms to Complete
(A-1) Exceed by not less than 25% the energy efficiency levels attained by conforming to the CCBFC, "Model National Energy Code for Buildings (MNECB)." ***Note that this compliance path requires that the proposed building is shown to consume at least 25% less energy than the MNECB reference building when modelled according to the procedures outlined in Part 8 of the MNECB.***	☐ YES	FORM A
(A-2) Exceed by not less than 5% the energy efficiency levels attained by conforming to the ANSI/ASHRAE/IESNA 90.1 - 2010 "Energy Standard for Buildings Except Low-Rise Residential Buildings." ***Note that this compliance path requires that the proposed building is shown to consume at least 5% less energy than the ASHRAE 90.1-2010 reference building when modelled according to the procedures outlined in Chapter 11 of ASHRAE 90.1-2010.*** ***Note that this path cannot be used for a building with electric space heating. Refer to SB-10.***	☐ YES	FORM A
(B) Achieve the energy efficiency levels attained by conforming to the ASHRAE 90.1-2010, "Energy Standard for Buildings Except Low-Rise Residential Buildings" and Chapter 2 of SB-10 (Division 3). ***This compliance path includes both prescriptive and performance path options. Please proceed to Form B.***	☐ YES	FORM B

OBC SB-10 COMPLIANCE (1) EXCEED MNECB BY NOT LESS THAN 25% FORM A
(2) EXCEED ASHRAE 90.1-2010 BY NOT LESS THAN 5%

Please select which of the two options pursued for compliance:

PROPOSED BUILDING IS SHOWN TO CONSUME AT LEAST 25% LESS ENERGY (GJ or kWh) ANNUALLY THAN THE MNECB REFERENCE BUILDING. ENERGY CONSUMPTION VALUES ARE DETERMINED ACCORDING TO THE MODELLING PROCEDURES IDENTIFIED IN PART 8 OF THE MNECB.	□ YES
PROPOSED BUILDING IS SHOWN TO CONSUME AT LEAST 5% LESS ENERGY (GJ or kWh) ANNUALLY THAN THE ASHRAE 90.1-2010 REFERENCE BUILDING. ENERGY CONSUMPTION VALUES ARE DETERMINED ACCORDING TO THE MODELLING PROCEDURES OUTLINED IN CHAPTER 11 OF ASHRAE 90.1-2010.	□ YES

Project: Modeller Name:

Occupancies	**Floor Area**
□ Assembly	_____
□ Health/Institutional	_____
□ Hotel/Motel	_____
□ Light Manufacturing	_____
□ Multifamily	_____
□ Office	_____
□ Restaurant	_____
□ Retail	_____
□ School	_____
□ Warehouse	_____
□ Other	_____
Total	_____

Annual Energy Summary [1]

Annual Consumption Summary	**Reference Building Energy**	**Proposed Building Energy**	**Units**
Space Heating	_____	_____	_____
Space Cooling	_____	_____	_____
HVAC Auxiliary	_____	_____	_____
Misc. Electrical	_____	_____	_____
Service Hot Water	_____	_____	_____
Interior Lighting	_____	_____	_____
Other _____	_____	_____	_____
Other _____	_____	_____	_____
Total Annual Energy		>	_____
Percentage less energy used by proposed building:			

□ **Proposed Building Description**

_____
_____
_____
_____

Reference Building Energy and Proposed Building Energy Consumptions are calculated by:

Please specify modelling software: _____

HVAC System Descriptions	Energy Efficiency Features in Proposed Building Design [2]
Reference Building Design	
_____	_____
_____	_____
_____	_____
_____	_____
	_____
Proposed Building Design	_____
_____	_____
_____	_____
_____	_____
_____	_____

Individual certifying authenticity of the data provided in this analysis. By signing this, the individual confirms that the models accurately reflect the reference and proposed building designs:

Signature:	Name/Title:

Notes: (1) Verify with building official whether full modelling report is required to be submitted
(2) Explain major energy saving features utilized to achieve modelled savings

OBC SB-10 AND ASHRAE 90.1 - 2010 – COMPLIANCE SUMMARY — Form B

Project:	Location of Project:
Building Permit Application No.:	Climate Zone:

ASHRAE 90.1 – 2010 COMPLIANCE AS MODIFIED BY OBC SB-10 DIVISION 3

The building design complies with the mandatory provisions of the following sections regardless of the compliance path:

ASHRAE 90.1-2010 Standard Section	Compliance Column	Form
5.4 BUILDING ENVELOPE AND SB-10 DIVISION 3	□ YES	FORM 5.4
6.4 HEATING, VENTILATING AND AIR CONDITIONING	□ YES	FORM 6.3 or FORM 6.4
7.4 SERVICE WATER HEATING SYSTEMS AND EQUIPMENT	□ YES	FORM 7.4
8.4 POWER	□ YES	FORM 8.4
9.4 LIGHTING	□ YES	FORM 9.4
10.4 OTHER EQUIPMENT AND SB-10 DIVISION 3	□ YES	FORM 10.4

METHOD OF COMPLIANCE

Building Design must comply with either the Prescriptive Requirements or the Energy Cost Budget Method. Indicate which method was selected.

Compliance Method	Compliance Column	Form
PRESCRIPTIVE COMPLIANCE	□ YES	COMPLETE SECTION B-1
ENERGY COST BUDGET METHOD	□ YES	COMPLETE SECTION B-2

B-1: PRESCRIPTIVE COMPLIANCE – ASHRAE 90.1-2010 AND OBC SB-10

The building design complies with the Prescriptive Compliance of the following sections:

Standard Section Reference		Compliance Column	Form
Sec 5 BUILDING ENVELOPE	Prescriptive Requirements (5.5 of 90.1)	□ YES	FORM 5.5 or
	Building Envelope Trade-Off (5.6 of 90.1)	□ YES	FORM 5.6
Sec 6 HVAC SYSTEMS	Simplified Approach for HVAC Systems	□ YES	FORM 6.3 or
	Mandatory + Prescriptive Path Option	□ YES	FORM 6.4
Sec 7 SERVICE WATER HEATING	Prescriptive Path Option	□ YES	FORM 7.4
Sec 9 LIGHTING	Prescriptive Requirements	□ YES	FORM 9.5

B-2: ENERGY COST BUDGET METHOD – ASHRAE 90.1-2010 AND OBC SB-10

	Compliance Column	Form
The building design complies with the provisions of Section 11 of ASHRAE 90.1-2010, based on Division 3 of SB-10.	□ YES	FORM 11

ASHRAE 90.1-2010 AND OBC SB-10 DIVISION 3– MANDATORY PROVISIONS Form 5.4

SECTION 5.4 MANDATORY PROVISIONS	
Building insulation has been designed to comply with section 5.4.1 of ASHRAE 90.1-2010 as modified by Chapter 2 of OBC SB-10.	□ YES
Building fenestration and doors have been designed to comply with section 5.4.2 of ASHRAE 90.1-2010 as modified by Chapter 2 of OBC SB-10.	□ YES
Building air leakage has been designed to comply with section 5.4.3 of ASHRAE 90.1-2010 as modified by Chapter 2 of OBC SB-10.	□ YES

ASHRAE 90.1-2010 & SB-10 – SECTION 5.5 – PRESCRIPTIVE ENVELOPE OPTION Form 5.5-1

Section 5.5 Overall Building Design Requirements	
The building design must comply with the following general requirements. If any of these requirements are not met, the prescriptive path cannot be pursued. Consider the building envelope trade-off compliance or the Energy Cost Budget Method Described in Chapter 11 of ASHRAE 90.1-2010:	
Gross Wall Area: _____ m² *Vertical Fenestration Area*: _____ m² *Vertical fenestration area* is less than 40% of the *gross wall area*	□ YES
Gross Roof Area: _____ m² *Skylight Area*: _____ m² *Total skylight area does not exceed 5% of the gross roof area*	□ YES
Total east vertical fenestration area is less than south vertical fenestration area and total west vertical fenestration area is less than south vertical fenestration area. Exception (from AHRAE 90.1-2010 Section 5.5.4.5): _____	□ YES or exception has been noted
If electric space heating is used, Table SB5.5-7 has been used regardless of climatic location	□ YES □ N/A
For Climate Zone 5, minimum skylight fenestration area conforms to the requirements of ASHRAE 90.1-2010 5.5.4.2.3.	□ YES □ N/A
Identify SB-10 Table used for maximum U-Factors or minimum RSI-Values : _____	

Complete the table on Form 5.5-2 to show compliance for all envelope components. Attach as many copies of this form as required to ensure that all envelope components are represented.

For all opaque surfaces, compliance must be demonstrated by meeting either:

1. *The minimum R-values of insulation added in framing cavities and continuous insulation as specified in Tables SB5.5-5 to SB5.5-7.*
2. *The maximum U-factor, C-factor, or F-factor for the entire assembly as specified in Tables SB5.5-5 to SB5.5-7. U-factor is to be determined from tables in Appendix A of ASHRAE 90.1-2010 or through calculation methods described in ASHRAE 90.1-2010 Appendix Section A9.*

For all fenestration products, compliance with U-factors and SHGC must be determined for the overall fenestration product.

1. *Fenestration shall have a U-factor and SHGC not greater than those specified in SB-10 Tables SB5.5-5 to SB5.5-7.*
2. *U-factor to be determined through CSA or NFRC rating or by using ASHRAE 90.1-2010 Appendix A default values.*

ASHRAE 90.1-2010 & SB-10 – SECTION 5.5 – PRESCRIPTIVE ENVELOPE OPTION Form 5.5-2

Please complete the following table to include information on all walls, roofs, doors, and floors used in the design.

OPAQUE BUILDING ENVELOPE COMPONENTS

Opaque Element - Description[1]	Space Conditioning Category [2]	Class of Construction [3]	Criteria Max. U-Value[4] or Min RSI-Value	Design U-Value[4] or RSI-Value	Area Weighted Average Used[5]?
	□ NR □ R □ SH				□ Y □ N
	□ NR □ R □ SH				□ Y □ N
	□ NR □ R □ SH				□ Y □ N
	□ NR □ R □ SH				□ Y □ N
	□ NR □ R □ SH				□ Y □ N
	□ NR □ R □ SH				□ Y □ N
	□ NR □ R □ SH				□ Y □ N
	□ NR □ R □ SH				□ Y □ N
	□ NR □ R □ SH				□ Y □ N
	□ NR □ R □ SH				□ Y □ N
	□ NR □ R □ SH				□ Y □ N
	□ NR □ R □ SH				□ Y □ N
	□ NR □ R □ SH				□ Y □ N
	□ NR □ R □ SH				□ Y □ N

Please complete the following table to include information on all fenestration products used in the design.

FENESTRATION ENVELOPE COMPONENTS

Fenestration - Description[1]	Space Conditioning Category [2]	Class of Construction [3]	U-Value[4]		SHGC[6]		Area Weighted Average Used[5]?
			Criteria	Design	Criteria	Design	
	□ NR □ R □ SH						□ Y □ N
	□ NR □ R □ SH						□ Y □ N
	□ NR □ R □ SH						□ Y □ N
	□ NR □ R □ SH						□ Y □ N
	□ NR □ R □ SH						□ Y □ N
	□ NR □ R □ SH						□ Y □ N
	□ NR □ R □ SH						□ Y □ N
	□ NR □ R □ SH						□ Y □ N
	□ NR □ R □ SH						□ Y □ N

(1) Indicate if Element is a Wall, Roof, Floor, Door, Window or Skylight and a Tag or Description (eg Wall – W1).
(2) Select from Non-residential (NR), Residential (R), or Semiheated (SH).
(3) Select from the subclasses of roofs, walls, floors, doors and fenestration provided in Tables SB5.5-5 to SB5.5-7 (eg. Steel Framed for walls). Note that curtain wall systems are considered a steel framed wall.
(4) F-Factors can be used for floors and C-Factors for below Grade Walls as applicable.
(5) Elements of the same type, space category, and class of construction can be averaged using area weighting to show compliance only if U-Values are used.
(6) Design SHGC may be higher than the criteria if the one of the exceptions from ASHRAE 90.1-2010 5.5.4.4.1 is applicable. Please use the space below to identify the fenestration elements (if any) which an exception for SHGC is being claimed:

SHGC EXCEPTIONS

Fenestration Element	SHGC Exception from ASHRAE 90.1-2010 5.5.4.4.1

ASHRAE 90.1-2010 & SB-10 – SECTION 5.5 –BUILDING ENVELOPE TRADE-OFF OPTION Form 5.6

Note that this option may only be pursued if the procedure as described in ASHRAE 90.1-2010 section 5.6 has been modified with the requirements of Chapter 2 of SB-10.

Calculated EPF for proposed building*: _____
Calculated EPF for budget building*: _____

Envelope performance factor (EPF) for proposed building is less than or equal to the envelope performance factor of the budget building.	□ YES
The envelope performance factor considers only the building envelope components.	□ YES
Schedules of operation, lighting power, equipment power, occupant density, and mechanical systems are the same in both the proposed and budget building.	□ YES
Calculations from ASHRAE 90.1-2010 Appendix C have been attached, and include the modifications from SB-10. *Or* A software program* incorporating the requirements of ASHRAE 90.1-2010 as modified by SB-10 has been used to calculate the EPF. A report from this software is attached. Name of software: _____	□ YES □ YES

**Note that the EPF must be calculated by a software program which includes the requirements of ASHRAE 90.1-2010 as modified by SB-10.*

ASHRAE 90.1 & SB-10- SECTION 6.3 HVAC SIMPLIFIED APPROACH — Form 6.3

If simplified HVAC method is used complete this form, otherwise proceed to Form 6.4.

Number of Stories:	Gross floor area: m²

Reference		Standard Compliance
6.3.1	The building is 2 stories or less in height and has a gross floor area less than 2,323 m².	□ YES □ NO
6.3.2	All of the requirements in Section 6.3 as outlined below must be met by each HVAC system in the facility.	
6.3.2.a	System serves a single HVAC zone.	□ YES □ NO
6.3.2.b	The equipment meets the variable flow requirements of Section 6.4.3.10.	□ YES □ N/A □ NO
6.3.2.c	If a cooling is installed, it is provided by a unitary packaged or split-system air conditioner that is either air-cooled or evaporatively cooled and meets the efficiency requirements shown in Tables 6.8.1A, 6.8.1B, and 6.8.1D.	□ YES □ N/A □ NO
6.3.2.d	The system has an air economizer with outside airflow capacity and controls as required per Section 6.5.1., unless exempt.	□ YES □ N/A □ NO
6.3.2.e	Heating is provided by a unitary packaged or split-system heat pump, a fuel-fired furnace, an electric resistance heater or a baseboard system connected to a boiler. All heating equipment meets the efficiency requirements shown in Table 6.8.1 B, 6.8.1D, 6.8.1E, and 6.8.1F.	□ YES □ N/A □ NO
6.3.2.f	System meets the exhaust air energy recovery requirements of Section 6.5.6.1 , unless exempt.	□ YES □ N/A □ NO
6.3.2.g	The system is controlled by a manual changeover or dual setpoint thermostat.	□ YES □ NO
6.3.2.h	Heat pumps equipped with auxiliary internal electric resistance heaters (if any) have controls to prevent supplemental heater operation when the heating load can be met by the heat pump alone.	□ YES □ N/A □ NO
6.3.2.i	The system controls do not permit reheat or any other form of simultaneous heating and cooling for humidity control.	□ YES □ N/A □ NO
6.3.2.j	Systems are provided with a time switch that (1) can start and stop the system under different schedules for seven different day-types per week; (2) is capable of retaining programming and time setting during a loss of power for a period of at least 10 h; (3) includes an accessible manual override that allows temporary operation of the system for up to 2 h; (4) is capable of temperature setback down to 13° C during off hours; and (5) is capable of temperature setup to 32° C during off hours unless exempt.	□ YES □ N/A □ NO
6.3.2.k	Piping is insulated in accordance with values given in Table 6.8.3A and 6.8.3B. Insulation exposed to weather is suitable for outdoor service (i.e. protected by aluminum, sheet metal, etc. or painted with a coating that is water retardant and provides shielding from solar radiation).	□ YES □ N/A □ NO
6.3.2.l	Ductwork and plenums are insulated in accordance with Tables 6.8.2A and 6.8.2B and sealed in accordance with Section 6.4.4.2.1.	□ YES □ N/A □ NO
6.3.2.m	Specifications call for ducted air systems to be balanced.	□ YES □ N/A □ NO
6.3.2.n	Outdoor air intake and exhaust systems meet the controls requirements of Section 6.4.3.4.	□ YES □ N/A □ NO
6.3.2.o	Where separate heating and cooling equipment serve the same temperature zone, thermostats are interlocked to prevent simultaneous heating and cooling.	□ YES □ N/A □ NO
6.3.2.p	Systems with a design supply air capacity greater than 5,000 L/s have optimum start controls.	□ YES □ N/A □ NO
6.3.2.q	In spaces larger than 50m² and with design occupancy of more than 40 people per 100m², the system complies with the demand control ventilation requirements in Section 6.4.3.9, unless exempt.	□ YES □ N/A □ NO

SECTION 6 HVAC – 6.4 MANDATORY PROVISIONS AND 6.5 PRESCRIPTIVE REQUIREMENTS		Form 6.4
Reference		Standard Compliance
	Mandatory Provisions – Complete only if simplified HVAC method is not used.	
6.4.1	Equipment shown in Tables 6.8.1A through 6.8.1K meets minimum performance at the specified rating conditions in accordance with the test procedures in the tables or those in SB-10 Chapter 2 - Table 6.4.1.A.2.	□ YES □ NO
6.4.2.1	Load calculations for heating and cooling systems are done as per ASHRAE Standard 183-2007 for selection of all equipment and systems.	□ YES □ NO
6.4.2.2	Pressure drop through each device and pipe segment in the critical circuit at design conditions has been calculated in accordance with generally accepted engineering standards and handbooks.	□ YES □ NO
6.4.3	Mandatory controls requirements are met by all the equipment in the building as outlined in Section 6.4.3.	□ YES □ NO
6.4.4.1	Ductwork, piping, and equipment insulation meets the requirements of Section 6.4.4.1.	□ YES □ NO
6.4.4.2	Construction documents specify sealing and pressure testing of ductworks and plenums as per Section 6.4.4.2.	□ YES □ NO
	Prescriptive Requirements – Complete this section if not using Energy Cost Budget Method.	
6.5.1	Each cooling system that has a fan employs either airside or waterside economizer unless exempt.	□ YES □ N/A □ NO
6.5.1.1	Airside economizers are capable of modulating outdoor air dampers to provide up to 100% design airflow for cooling and the system provides relief capacity for such airflow.	□ YES □ N/A □ NO
6.5.1.2.1	Waterside economizers are capable of cooling supply air up to 100% of the expected system cooling load at the conditions listed under Section 6.5.1.2.1.	□ YES □ N/A □ NO
6.5.1.2.2	Waterside economizer systems with pressure drop greater than 45kPa are isolated from main cooling loop to reduce pumping input in the normal cooling mode.	□ YES □ N/A □ NO
6.5.1.3	Economizer systems are capable of providing cooling even when additional mechanical cooling is required to meet the cooling load.	□ YES □ N/A □ NO
6.5.2	Simultaneous heating and cooling is limited with compliant zone, hydronic system, dehumidification, and humidification controls as per Section 6.5.2.	□ YES □ N/A □ NO
6.5.3	Variable air volume (VAV) fan controls comply with the requirements of 6.5.3.2 and 6.5.3.3.	□ YES □ N/A □ NO
6.5.3.1	Fan systems exceeding 4kW nameplate power meet prescriptive fan power limitations as per Table 6.5.3.1.1A and Section 6.5.3.1.2.	□ YES □ N/A □ NO
6.5.4.1	Pumping systems greater than 7.5 kW employ compliant variable flow controls, unless exempt.	□ YES □ N/A □ NO
6.5.4.2	Chilled water plants with more than one chiller and boiler plants with more than one boiler reduce loop water flow automatically whenever a chiller or boiler is shut down.	□ YES □ N/A □ NO
6.5.4.3	Hydronic systems exceeding design capacity of 88 kW include controls to reset supply water temperature based on building loads or outdoor air temperature.	□ YES □ N/A □ NO
6.5.4.4	Hydronic heat pumps and unitary air-conditioners include automatic water shutoff when the compressor is off and those having total pump system power greater than 3.7 kW have variable speed control.	□ YES □ N/A □ NO
6.5.4.5	Chilled water and condenser water pipe is sized according to Table 6.5.4.5.	□ YES □ N/A □ NO
6.5.5	All heat rejection equipment with fan motors $\geq$ 5.6 kW employs variable speed controls that comply with Section 6.5.5.2.	□ YES □ N/A □ NO
6.5.6.1	Exhaust air energy recovery is provided for fan systems meeting the conditions listed on Table 6.5.6.1. Energy recovery is at least 50% effective and bypass is available to permit air economizer operation as per Section 6.5.1.1.	□ YES □ N/A □ NO
6.5.6.2	Condenser heat recovery system for heating or preheating hot water is provided, unless exempt.	□ YES □ N/A □ NO
6.5.7.1	Kitchen exhaust systems are designed as per Section 6.5.7.1.	□ YES □ N/A □ NO
6.5.7.1.5	Specifications call for performance testing of kitchen exhaust systems.	□ YES □ N/A □ NO
6.5.7.2	Laboratory fume hoods with a total exhaust system flow > 2,360 L/S comply with the variable air volume control requirements of 6.5.7.2.	□ YES □ N/A □ NO
6.5.8.1	Heating of unenclosed spaces is done by radiant heating, except loading docks with air curtains.	□ YES □ N/A □ NO
6.5.9	Cooling equipment with hot-gas bypass controls is designed with multiple steps of unloading or continuous capacity modulation, unless exempt as indicated in Table 6.5.9.	□ YES □ N/A □ NO

ASHRAE 90.1 & SB-10- SECTION 7 SERVICE WATER HEATING — Form 7.4

SECTION 7 SERVICE WATER HEATING – 7.4 MANDATORY PROVISIONS AND 7.5 PRESCRIPTIVE REQUIREMENTS		
Reference	Item	Standard Compliance
7.4.1	Load calculations for heating and cooling systems are done in accordance with manufacturer's published sizing guidelines or generally accepted engineering standards and handbooks for selection of all equipment and systems.	□ YES □ NO
7.4.2	Equipment used solely for heating potable water, pool heaters, and hot water storage tanks meets or exceeds the efficiency requirements of Table 7.8. • Exception: Equipment not listed in Table 7.8.	□ YES □ N/A □ NO
7.4.3	The following service hot water piping is insulated to levels shown in Table 6.8.3: a. Recirculating system piping, including piping of a circulating tank type water heater. b. The first 2.4m of outlet piping for a constant temperature non-recirculating storage system. c. Inlet pipe between storage tank and heat trap in a non-recirculating storage system. d. Pipes that are externally heated (e.g. heat tracing).	□ YES □ N/A □ NO
7.4.4.1	All water-heating systems have temperature controls that are adjustable down to 49°C or lower. • Exception: Equipment that must be protected from corrosion, as per manufacturer's installation instructions.	□ YES □ N/A □ NO
7.4.4.2	Systems designed with pipe heating systems such as heat trace have temperature or time controls to disable during extended periods without hot water demand.	□ YES □ N/A □ NO
7.4.4.3	Public lavatories have outlet temperature controls that limit the discharge temperature to 43°C.	□ YES □ N/A □ NO
7.4.4.4	Tanks with remote heaters have circulation pump controls to limit operation of circulation pumps to a maximum of five minutes after the end of the heating cycle.	□ YES □ N/A □ NO
7.4.5.1	Pool heaters have readily accessible ON/OFF switch without adjusting the thermostat setting. Gas-fired heaters do not have standing pilot lights.	□ YES □ N/A □ NO
7.4.5.2	Heated pools have vapour retardant covers. Pools heated to above 32°C have a pool cover with a minimum insulation value of RSI-2.1 unless heated by site-recovered energy or solar energy.	□ YES □ N/A □ NO
7.4.5.3	Pool heaters and circulation pumps have time switches, unless exempt.	□ YES □ N/A □ NO
7.4.6	Heat traps are provided to all vertical risers serving storage water heaters and storage tanks.	□ YES □ N/A □ NO
	Prescriptive Requirement – Complete this section if not using Energy Cost Budget Method.	
7.5	Boiler systems that provide space heating as well as service water heating meet the conditions of Sections 7.5.1 and 7.5.2.	□ YES □ N/A □ NO

ASHRAE 90.1 & SB-10- SECTION 8,9 &10 POWER, LIGHTING AND OTHER EQUIPMENT

SECTION 8 POWER – 8.4 MANDATORY PROVISIONS		Form 8.4
Reference	Item	Standard Compliance
8.1.2	Low Voltage Dry-Type Distribution Transformers meet nominal efficiencies shown in Table 8.1, unless exempt.	□ YES □ N/A □ NO
8.4.1	Feeder conductors and branch conductors are sized as per Section 8.4.1.	□ YES □ NO
8.4.2	At least 50% of all 125 volt 15- and 20-Ampere receptacles installed in private offices, open offices, and computer classrooms are provided with automatic receptacle controls that function on a) time-of-day schedule or b) occupant sensor or c) occupancy signal from another control or alarm system.	□ YES □ NO

SECTION 9 LIGHTING– 9.4 MANDATORY PROVISIONS		Form 9.4
Reference	Item	Standard Compliance
9.4.1	Any automatic control devices used are "manual ON" or multi-level where the "automatic ON" function provides no more than 50% power unless exempt.	□ YES □ NO
9.4.1.1	Automatic lighting shutoff controls are provided for all interior spaces based on either a scheduled basis or controlled by an occupant sensor unless exempt.	□ YES □ N/A □ NO
	Schedule-based control devices are provided with independent schedules for areas of no more than 2,323m² but no more than one floor.	□ YES □ NO
	Occupancy-based control devices turn lights off within 30 minutes of all occupants leaving the *space,* or a signal from another control or alarm *system* that indicates the area is unoccupied.	□ YES ■ NO
9.4.1.2	Each space enclosed by ceiling-height partitions has at least one readily accessible control device that independently operates general lighting within the space in such a way that occupants can see the controlled lighting with multi-step controls and occupant sensors as per Section 9.4.1.2	□ YES □ NO
9.4.1.3	Lighting for parking garages is controlled by automatic shutoff controls meeting the requirements outlined in Section 9.4.1.1.	□ YES □ N/A □ NO
	Parking garage lighting is capable of automatically reducing lighting power of each luminaire by at least 30% based on occupancy.	□ YES □ N/A □ NO
	Daylight transition zones in parking garages are controlled separately. These are automatically turned on during daylight hours and off at sunset.	□ YES □ N/A □ NO
	Parking garage luminaires within 6m of perimeter walls that have a net opening-to-wall ratio of at least 40% automatically reduce power in response to daylight, except daylight transition zones.	□ YES □ N/A □ NO
9.4.1.4	Automatic daylighting controls are provided for separate control of general lighting in primary sidelighted areas greater than 23m² in an enclosed space. Multilevel photocontrol device complies with 9.4.1.4c unless exempt.	□ YES □ N/A □ NO
9.4.1.5	Automatic daylighting controls are provided for separate control of general lighting in daylight areas as required under Section 9.4.1.5. Multilevel photocontrol device complies with 9.4.1.5c unless exempt.	□ YES □ N/A □ NO
9.4.1.6	Additional control is provided to the applications listed in Section 9.4.1.6.	□ YES □ N/A □ NO
9.4.1.7	Exterior lights are shut off by an automatic photosensor when available daylight is sufficient, unless exempt.	□ YES □ N/A □ NO
	All building façade and landscape lighting is automatically shut off overnight as per 9.4.1.7b.	□ YES □ NO
	Exterior lighting not for façade or landscape lighting, including advertising signage, is automatically controlled to reduce lighting power by at least 30% overnight or during inactive periods.	□ YES □ NO
9.4.2	Exit signs do not exceed 5 W per face.	□ YES □ NO
9.4.4	Third party functional testing of all lighting control devices and systems is specified in the construction documents.	□ YES □ NO

SECTION 9 LIGHTING – INSTALLED LIGHTING POWER COMPLIANCE		Form 9.5
Reference		Standard Compliance
9.4.3	Exterior Lighting Zone _____ (Table 9.4.3A) **Total Installed Exterior Lighting Power _____ W ≤ value of exterior LPA _____W *** List any exemptions that apply:	□ YES □ N/A □ NO
	Prescriptive Requirements – Complete if not using Energy Cost Budget Method	
9.5, 9.6	**9.5 INTERIOR LIGHTING POWER ALLOWANCE BY BUILDING TYPE** Calculation of Interior Lighting Power Allowance (ILPA) by Building Type based on Table 9.5.1* Building Type _____ Gross Lighted Area _____ m² Lighting Power Density _____ W/m² **Total Installed Interior Lighting Power _____ W ≤ value of Interior LPA _____ W ***	□ YES □ N/A □ NO
	9.6 INTERIOR LIGHTING POWER ALLOWANCE BY SPACE FUNCTION Calculation of Interior Lighting Power Allowance (ILPA) for each space based on Table 9.6.1 * **Total Installed Interior Lighting Power _____ W ≤ value of Interior LPA _____ W *** List any exemptions that apply:	□ YES □ N/A □ NO

***** Calculation worksheets (FORM 9.5.2 and FORM 9.5.3) are available.

SECTION 10 OTHER EQUIPMENT - MANDATORY PROVISIONS		Form 10.4
Reference	Item	Standard Compliance
10.4.1	Electric motors comply with Table 10.4.1.A(a) and Table 10.4.1.A(b) of SB-10.	□ YES
10.4.2	Service water pressure booster pumps have pressure sensor to vary pump speed and/or start and stop pumps.	□ YES □ N/A
	No devices are installed to reduce the pressure of all of the water supplied by any booster system or pump, except for safety devices.	□ YES □ N/A
	Booster pumps shut off when there is no service water flow.	□ YES □ N/A
10.4.3	All elevator cab lighting systems have efficacy of not less than 35 lumens per Watt.	□ YES □ N/A
	Elevator cab ventilation fans for elevators without air conditioning consume less than 0.7 W·s/L at maximum speed.	□ YES □ N/A
	Cab interior light and ventilation is disabled when elevators are stopped and unoccupied with doors closed for over 15 minutes.	□ YES □ N/A

ASHRAE 90.1-2010 & SB-10 ENERGY COST BUDGET (ECB) COMPLIANCE REPORT — FORM 11

Project:	Designer Name:

Occupancies	**Floor Area**
□ Assembly	_____
□ Health/Institutional	_____
□ Hotel/Motel	_____
□ Light Manufacturing	_____
□ Multifamily	_____
□ Office	_____
□ Restaurant	_____
□ Retail	_____
□ School	_____
□ Warehouse	_____
□ Other	_____
Total	_____

Annual Consumption Summary[1]	**Reference Building Energy**		**Proposed Building Energy**	**Units**
Space Heating	_____		_____	_____
Space Cooling	_____		_____	_____
HVAC Auxiliary	_____		_____	_____
Misc. Electrical	_____		_____	_____
Service Hot Water	_____		_____	_____
Interior Lighting	_____		_____	_____
Other _____	_____		_____	_____
Other _____	_____		_____	_____
Total Annual Energy				_____
Total Annual Energy Cost	$	>	$	_____

□ **Proposed Building Description**

_____
_____
_____
_____

Reference Building Energy and Proposed Building Energy Consumptions are calculated by:

Please specify modelling software: _____

HVAC System Descriptions	Energy Efficiency Features in Proposed Building Design[2]
Reference Building Design _____ _____ _____ _____ Proposed Building Design _____ _____ _____ _____	_____ _____ _____ _____ _____ _____ _____ _____ _____ _____
Building is in compliance with mandatory requirements of sections 5.4, 6.4, 7.4, 8.4, 9.4, and 10.4	□ YES

Compliance Result

The design detailed in the above referenced plans complies with the mandatory requirements of the ASHRAE 90.1-2010 Standard and the additional requirements of Supplementary Standard SB-10. The proposed building energy cost (design energy cost) does not exceed the reference building energy cost (energy cost budget). Therefore, this design **DOES COMPLY** with the ASHRAE 90.1-2010 ECB compliance methodology and the additional requirements of Supplementary Standard SB-10.

Individual certifying authenticity of the data provided in this analysis:

Signature:	Name/Title:

Notes: (1) Verify with building official whether full modelling report is required to be submitted.
(2) Explain major energy saving features utilized to achieve modelled savings.

ASHRAE 90.1 & SB-10 - SECTION 9 – LIGHTING COMPLIANCE WORKSHEET FORM 9.5.2

Project:	Designer Name:

Interior Power Allowance (Building Area Method) Table 9.5.1

Building Type	Lighting Power Density Allowance (W/m²)	Gross Lighted Floor Area (m²)	Lighting Power Allowance (W) (LPDxGLFA)
		Total Power Allowance	

Interior Lighting Power Allowance (Space by Space Method) Table 9.6.1

Building Type	Common/Specific Space Type	Lighting Power Density Allowance (W/m²)	Space Area (m²)	Lighting Power Allowance (W)
			Total Power Allowance	

Interior Connected Lighting Power

Space ID	Luminaire Description (including number of lamps per fixture, watts per lamp, type of ballast, type of fixture)	Number of Luminaires	Watts/ Luminaire	Total Watts
			Total Interior Lighting Power	

* If additional space is required to provide further information, please attach a separate sheet(s) of paper.
** If additional interior lighting power, trade-offs or exceptions are used attach calculations.

ASHRAE 90.1 & SB-10 - SECTION 9 – LIGHTING COMPLIANCE WORKSHEET FORM 9.5.3

Project:	Designer Name:

Exterior Building Lighting Power Allowance			
Location / Application	Allowance	Area or Length (m² or m)	Tradable Power Allowance
Exterior Lighting Zone		Base Site Allowance	
		Tradable Power Allowance	

Exterior Installed Lighting Power				
ID	Luminaire description (including number of lamps per fixture, watts per lamp, type of ballast, type of fixture)	Number of Luminaires	Watts/ Luminaire	Total Watts
			Total Exterior Lighting Power	

* If additional space is required to provide further information, please attach a separate sheet(s) of paper.
** If trade-offs or exceptions are used attach calculations.