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BRITISH COLUMBIA

*CERTIFIED PROFESSIONAL* PROGRAM

PRACTICE AND PROCEDURE MANUAL

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## Table of Contents

List of Tables and Figures.....	4
List of Attachments .....	4
List of Abbreviations .....	4
1.0 Introduction .....	5
1.1 General .....	5
1.2 History of the <i>Certified Professional</i> Program .....	6
1.3 Purpose of this Manual .....	6
1.4 Qualifications to Become and Remain a <i>CP</i> .....	7
2.0 Application of the <i>CP</i> Program .....	7
2.1 Introduction.....	7
2.2 New <i>Buildings</i> .....	7
2.3 Existing and Heritage <i>Buildings</i> .....	7
2.4 New Housing and Small <i>Buildings</i> .....	8
2.5 Tenant Improvements (for <i>CP</i> Projects Under Construction).....	9
3.0 Responsibilities of the <i>Building Owner</i> and Design Team .....	12
3.1 Introduction.....	12
3.2 <i>Owner</i> .....	12
3.3 <i>Coordinating Registered Professional</i> .....	13
3.4 <i>Registered Professional of Record</i> .....	14
3.5 Contractor.....	14
3.6 <i>Authority Having Jurisdiction</i> .....	15
4.0 Responsibilities of the <i>CP</i> .....	15
4.1 Introduction.....	15
4.2 Code Coordination from the <i>CP</i> 's Point of View .....	16
4.2.1 Parts 4, 5, 6 and 7 of Division B.....	18
4.2.2 Part 10 .....	
4.3 Use of <i>CP</i> Stamp and Professional Seal.....	19
4.4 Delegation of Responsibility .....	21
5.0 Responsibilities During <i>Building</i> Design Development .....	22
5.1 Introduction.....	22
5.2 Review of Plans and Supporting Documents .....	23
5.2.1 Architectural.....	23
5.2.2 Structural.....	23
5.2.3 Mechanical, Plumbing and Fire Suppression.....	23
5.2.4 Electrical .....	24
5.2.5 Specialist Consultants .....	24
5.2.6 Alternative Solutions.....	25
5.2.7 Code Compliance Drawings .....	25
6.0 Responsibilities <i>CP</i> During the <i>Building</i> Permit Application Stage .....	27
6.1 Introduction.....	27
6.2 Permit Application Procedure .....	27

6.3 Documentation Submission Requirements .....	27
6.4 Staged <i>Building</i> Permits .....	28
7.0 Responsibilities of the <i>CP</i> during the <i>Building</i> Construction Stage .....	29
7.1 Introduction .....	29
7.2 Trade Permits .....	29
7.3 Construction Safety .....	30
7.4 <i>Field Reviews</i> during Construction Conducted by the <i>RPRs</i> .....	30
7.4.1. Site Reviews during Construction Conducted by the <i>CP</i> .....	30
7.4.1.1 Extent to Which <i>CP</i> Site Reviews May be Delegated .....	31
7.4.1.2 Delegation of <i>CP</i> Detailed Site Reviews to other <i>CPs</i> .....	32
7.4.1.3 Delegation of <i>CP</i> Detailed Site Reviews to Non- <i>CPs</i> .....	32
7.4.2 <i>Field Review</i> Conducted by <i>RPRs</i> .....	32
7.4.3 <i>CPs</i> Monitoring of <i>Field Reviews</i> Undertaken by the Project Team .....	33
7.5 Review of Shop Drawings .....	35
7.6 Changes During Construction .....	36
7.7 Public Access to Display Suite(s) and Sales Centre within a <i>Building</i> Under Construction .....	37
8.0 Responsibilities of the <i>CP</i> during the <i>Building</i> Occupancy Stage .....	38
8.1 Introduction .....	38
8.2 Fundamental Principles and Mechanisms for Obtaining an Occupancy Permit .....	39
8.2.1 Test Protocol .....	40
8.2.2 Consultant Demonstration .....	41
8.2.3 <i>AHJ</i> Demonstration .....	41
8.2.4 Consultant Final <i>Field Review</i> .....	41
8.2.5 <i>AHJ</i> Final Occupancy Reviews .....	42
8.3 Occupancy Submission Documentation .....	42
8.4 Occupancy Permit with Work Required .....	42
8.5 Final Design Drawings (formerly called Record Drawings) .....	43
8.6 Occupancy Permits for Partially Completed <i>Buildings</i> .....	43
8.6.1 Partial Occupancy with Minor Areas Excluded .....	44
8.6.2 Partial Occupancy with Major Areas Excluded .....	44
8.6.3 Occupancy of One <i>Building</i> in a Project with Multiple <i>Building</i> Components .....	44
8.6.4 Occupancy of Base <i>Building</i> Shell .....	45
8.6.5 Principles and Procedures for Partially Completed <i>Buildings</i> .....	45
9.0 Responsibilities of the <i>CP</i> after <i>Building</i> Occupancy .....	46
9.1 Introduction .....	46
9.2 Refund of Permit Fees .....	46
9.3 Complaints Post Occupancy .....	46
10.0 Further Resources .....	47
List of Attachments .....	48

## List of Tables and Figures

Table 1: Sample <i>Field Review</i> Components.....	30
Table 2: Review of Shop Drawings.....	31

## List of Attachments

Attachment 1 - *Certified Professional* Program: Occupancy Procedures for *CP* Projects

Attachment 2 - *Certified Professional* Program: Occupancy Document Checklist

## List of Abbreviations

AIBC	Architectural Institute of British Columbia
AHJ	<i>Authority Having Jurisdiction</i>
APEGBC	Association of Professional Engineers and Geoscientists of British Columbia
BCBC	British Columbia <i>Building Code</i>
BI	<i>Building Inspector</i>
BP	<i>Building Permit</i>
CBO	Chief <i>Building Official</i>
CP	<i>Certified Professional</i>
CRP	<i>Coordinating Registered Professional</i>
DP	Development Permit
FD	Fire Department
SRP	Supporting <i>Registered Professional</i>
RP	<i>Registered Professional</i>
RPR	<i>Registered Professional of Record</i>
SRP	Supporting Registered Professional
TI	Tenant Improvement

The terms "*building code*" and "*code*" are used throughout this document. Both of these terms reference the current British Columbia *Building Code*.

All *building code* reference numbers in the Manual refer to the 2012 British Columbia *Building Code*.

## 1.0 Introduction

### 1.1 General

This version of the *CP* Practice and Procedure Manual applies only to *CP* projects outside the City of Vancouver and is based on the administration of the *CP* Program by AIBC and APEGBC. This Manual will be updated from time to time to suit changes to the *CP* Program and changes to the *Building* code.

The *Certified Professional* Program is an alternative to the conventional *AHJ building* permit and monitoring of the construction process. As part of this alternative process the *CP* provides his or her professional assurance to the *AHJ* that he or she will take all appropriate steps to ascertain that the design will substantially comply and the construction of the project will substantially conform in all material respects with the *building* code, other applicable safety enactments and the related development permit. The Chief *Building* Official relies upon the *CP's* assurances in issuing *Building* Permits and Occupancy Permits for a project constructed under the *CP* program. This manual is intended to be used as a guide in executing the *CP* Program in the Province of British Columbia (excluding the City of Vancouver) where local governments have adopted the *CP* Program. There is a separate manual for the *CP* Program within the City of Vancouver.

There are many reasons why a property *owner* chooses to use this Alternate Permit Process. Usually the *owner* uses the *CP* permit process to expedite the *Building* permit issuance. In some jurisdictions, the *CP* permit process may allow for staged permitting and staged construction, which can be attractive to fast track projects. Staged permitting and staged construction is generally not available, except on a *Certified Professional* project.

The *owner* has an expectation that the *CP* is looking after the *owner's* best interests. Since the *CP* is also acting on behalf of the *AHJ* in undertaking plan reviews and site reviews, the *CP* also has an obligation to the *AHJ* in respect to "Code Coordination" [refer to Section 4.2]. Although there may be a perceived conflict of interest in these two roles of the *CP*, in actual fact there is no conflict. The *CP* is bound by the by-laws and code of ethics of their professional association which mandates protection of the public as the primary responsibility of their members.

The use of the *CP* process is not mandatory for permit issuance. Practicing as a *CP* is an earned privilege. In order for the *CP* Program to operate successfully, the *CP* must demonstrate competence in code knowledge and must be familiar with procedures as outlined in this Manual. The *AHJ* places a high level of expectation on the *CP*, as a result, *CP* projects are given significantly less oversight than conventional projects by local government staff.

## 1.2 History of the *Certified Professional* Program

The *Certified Professional* Program was originally conceived for Vancouver in late 1978. It was recognized at that time that in many instances designers were relying too heavily on the AHJ's plan reviewers and inspectors for complete verification of project compliance with the *building* code. The program was intended to give appropriate responsibility and authority for *building* code conformance and the underlying responsibility for ensuring public health and safety in and around *Buildings*, to registered Architects and Professional Engineers.

A joint committee of the Architectural Institute of B.C. (AIBC), Association of Professional Engineers and Geoscientists of B.C. (APEGBC) and *Building* Officials' Association of B.C. (BOABC) was formed to create and coordinate the implementation of the program.

In 1980 an educational course on "Use and Occupancy", Part 3 of the B.C. *Building* Code and the Vancouver *Building* By-law, was established through the University of B.C. Centre for Continuing Education. *Certified Professional* candidates were required to attend and pass this course. Subsequent courses and examinations have been offered on a regular basis to expand the program to a wider number of participants. Although a large number of participants have taken this course over the years, only a small handful have gone on to take on the responsibilities of a *CP* on a project in Vancouver and other Participating Local Governments.

## 1.3 Purpose of this Manual

This Practice and Procedure Manual will provide guidance to *Certified Professionals* in their day-to-day activities while fulfilling their role as a *CP* on a Project. The intent of the Manual is to establish a minimum baseline of performance to which all *CPs* must adhere. This minimum baseline will improve the uniformity and consistency of the application of *CP* services throughout the *building* construction industry. It is important to note that this minimum baseline of performance is not intended to define the ceiling of expectations for *CPs*, only the floor.

## 1.4 Qualifications to Become and Remain a *CP*

A "*Certified Professional*" means an Architect or Professional Engineer registered to practice in British Columbia who has taken and passed the *Certified Professional* Course and been recognized as a *CP* by either AIBC or APEGBC and has been accepted by the AHJ as qualified as a *CP*.

A *Registered Professional* shall maintain their registration as a *CP* by the following:

- Maintenance of professional registration with AIBC or APEGBC;
- Demonstration of satisfactory knowledge of the provisions of the *Building* code; and
- Fulfillment of the obligations described in the letter of assurance Schedule *CP-1* when practicing as a *CP*.

Failure to comply with any of the above may result in removal of the *CP*'s registration.

## 2.0 Application of the *CP* Program

### 2.1 Introduction

This Section outlines the types of projects to which the *CP* Program can be applied.

### 2.2 New *Buildings*

The *CP* Program is applicable to the design and *construction* of any new *building* that falls under the scope of Sentence 1.3.3.2.(1) of Division A of the *building* code.

### 2.3 Existing and Heritage *Buildings*

The *CP* Program can be utilized for renovations and additions to *existing buildings*.

Since the BC *Building* Code does not have any specific guidelines for the level of upgrades that may be required to an existing *building* when it is being renovated or expanded, the *CP* must review with the *AHJ* during the initial design stages as to the expectation of the *AHJ*.

Due to the wide variety of conditions that could occur with existing *buildings*, the *CP* will prepare a *Building* Code Report that includes the recommended level of upgrades. This *Building* Code Report will also identify any significant non-code conforming existing conditions for those portions of the existing *building* that will not be upgraded (e.g. retention of existing stairs that do not meet the current requirements for stair rise and run).

The *CP* will also coordinate with the *RPRs* to determine if there are any unsafe conditions within the existing *building* that need to be corrected as part of the renovation or addition project. The existing unsafe conditions and the proposed remedial measures will be included in the *CP's Building Code Report*.

The *CP* will confer with the *AHJ* prior to the *building* permit application to obtain acceptance in principle of the proposed level of upgrades, retention of existing non-code conforming items and correction of unsafe conditions.

## 2.4 New Housing and Small *Buildings*

The *CP* Program was originally conceived to apply to Part 3 of Division B *buildings* only.

Since the *CP* Educational Program does not include any modules on Part 9 of Division B of the *building* code, the use of Part 9 for evaluating the *building* code requirements under the *CP* Program is limited.

When a *building* meets the size, height, and *occupancy* requirements for Part 9 of Division B, but the *owner* wishes to deliver the *project* using the *CP* Program, the *building* must be evaluated using Part 3 of Division B of the *building* code.

The *CP* may elect to implement certain provisions of Part 9 for applicable *buildings*, provided that these Part 9 provisions are clearly described in the *CP's Building Code Report* or code compliance drawings. Alternative Solution Reports are not required in order to implement the Part 9 provisions.

The following Part 9 provisions may be utilized for applicable *CP projects*, subject to the above procedure and acceptance by the *AHJ*. This list of provisions is not exhaustive and other items from Part 9 may be applicable on a case-by-case basis.

- Waiver of fire separations within dwelling units where the uppermost floor is greater than 6 metres above the lowest floor level;
- Spatial separation and exposure protection tables from Part 9; and
- Provisions for egress from a dwelling unit.



## 2.5 Tenant Improvements (for CP Projects under Construction)

The CP Program can be used for tenant improvement (TI) projects within a *building* shell, where the base *building* shell has not received its occupancy permit. This section outlines the procedures required for the issuance of a tenant improvement *building* permit within the base *building* that has been issued a *building* permit under the CP program.

The specific procedure for tenant improvement *building* permits is dependent upon the status of the base *building* occupancy permit. The most common examples of the status of occupancy permit clearance are outlined below:

- a. The base *building* shell for the tenant space is not complete and no *occupancy permit* has been issued for the base *building*. [See 2.5.1.]
- b. The base *building* shell for the tenant space is “essentially complete” with the specific exceptions of fire alarm verification, material test certificates for sprinklers, and functional testing of the fire and life safety systems; no *occupancy permit* has been issued for the base *building*. [See 2.5.2]
- c. The base *building* is partially complete and an *occupancy permit* has been issued for a portion of the base *building* that does not include the tenant space. [See 2.5.3]
- d. The base *building* is partially complete, and an *occupancy permit* has been issued for a portion of the base *building* that includes the tenant space (shell only). [See 2.5.4]
- e. The base *building* shell is complete and an *occupancy permit* has been issued for the entire *building* as shell space only (e.g. non-residential *buildings*). [See 2.5.4]
- f. The base *building* shell is complete, and a final *occupancy permit* has been issued that includes the completed portions of the base *building* and the shell spaces for the incomplete tenant portions. [See 2.5.4]

The CP should discuss the consequences of the different scenarios for tenant improvement work up-front with the *building owner* and the AHJ in order to facilitate the best plan for the anticipated *building* permit process. The *owner* should explain to potential tenants their obligations for the *building* permit process under the CP Program.

### 2.5.1 Base Building Shell is Not Complete [Example 2.5(a)]

If tenant improvement construction commences prior to the completion of the base *building* shell, there is only one option for processing the tenant improvement *Building* permit:

- a. The base *building* CP submits a separate *building* permit application under the CP program for the tenant improvement work (following standard CP submission requirements as applicable for the tenant space). For this Option, the tenant must retain a CRP and RPRs for all applicable disciplines. The CRP and RPRs can be the same RPs as the base *building*, or they can be independent RPs.

### 2.5.2 Base Building Shell is “Essentially Complete” [example 2.5(b)]

There are three possible options for tenant improvement *building* permit applications for work within a base *building* when the *building* shell space is “essentially complete” (with the specific exception of fire alarm verification, material test certificates for sprinklers, and functional testing of the fire and life safety systems) but has not yet been issued an occupancy permit by the *AHJ* under the *CP* program:

- a. The base *building CP* submits a separate *building* permit application under the *CP* program for the tenant improvement work (following standard *CP* submission requirements as applicable for the tenant space) For this Option, the tenant must retain a *CRP* and *RPRs* for all applicable disciplines. The *CRP* and *RPRs* can be the same *RPs* as the base *building*, or they can be independent *RPs*; or
- b. The tenant submits a separate *building* permit application, not under the *CP* program, for the tenant improvement work. As outlined in Schedule *CP-3*, the tenant must retain the base *building CP* to provide a review of the plans and supporting documents that have been prepared by the *TI RPRs* for certification of “tenant improvement compatibility” with the base *building*. The *CP* provides a Schedule *CP-3* to the *TI* permit’s *CRP*, including a list of *TI* drawings that the *CP* reviewed, and a list of minor items within the base *building* shell that are not yet complete (e.g. fire alarm verification), as accepted by the *CP* and the *AHJ*. The tenant improvement’s *CRP* makes the *building* permit application to the City under the non-*CP building* permit process, including the original signed and sealed Schedule *CP-3* in their submission (note that if the base *building* shell space is not “essentially complete” at the time of the *TI BP* application, the submission of the Schedule *CP-3* can be delayed until just prior to the issuance of the *TI BP*). The procedure and timing for permit issuance for these types of *TI* permits will follow the normal non-*CP* permit procedure. The *CP* does not need to apply his or her *CP* stamp on the *TI* drawings, and the *CP* does not provide any site review during construction of the *TI* work; or
- c. Tenant has their own *CP*. The tenant submits a separate *building* permit application under the *CP* Program, but using a different *CP* from the base *building*. The role of the base *building CP* under this scenario is identical to that described in Item 2.5.2.(b) above.

“Tenant improvement compatibility”, as noted above, means that the *CP* has taken the necessary steps to ascertain that the *RPRs* for the tenant improvement as shown on their plans and supporting documents for the project have provided substantial compatibility with the original *building* code concepts for the base *building*.

The *AHJ* will not release the Occupancy Permit for the *TI* work until the base *building* shell obtains an Occupancy Permit.

### ***2.5.3 Occupancy Permit has been Issued for the Shell of the Base Building Excluding the Area of the Tenant Space [example 2.5(c)]***

The options for a tenant improvement *building permit* application in a *building* that has been issued an *occupancy permit* for the shell space excluding the tenant space are the same as those outlined in section 2.5.2.

### ***2.5.4 Occupancy Permit Has Been Issued for the Shell of the Base Building That Includes the Area of the Tenant Space for the Proposed Work [Examples 2.5(d), (e) or (f)]***

Where the base *building* or base *building* shell has been issued an occupancy permit, *building* permit applications for TIs do not require any involvement of the *CP* responsible for the base *building* permit. The tenant may submit a TI *building* permit application directly to the *AHJ* or may obtain the services of a *CP*.

All tenant improvement work must be carried out under a new TI *building* permit that is separate from the base *building* permit. The tenant improvement work cannot be done under a revision to the base *building* permit once base *building* shell occupancy is given.

## 3.0 Responsibilities of the *Building Owner* and Design Team

### 3.1 Introduction

The responsibilities of the *building owner* and design team as described in the *building* code are unchanged whether or not a *CP* is involved in the construction project. This Section outlines the responsibilities of each party, in the context of a *CP* project.

### 3.2 *Owner*

The ultimate responsibility for code compliance rests with the *owner*, as stated in Article 1.2.1.2. of Division A.

As described in Subsection 2.2.7. of Division C and Schedule *CP-1*, the duties of the *owner* include the following:

- Retain a *CP* to undertake “Code Coordination”;
- Retain a *CRP* to coordinate all design work and *field reviews* of the *RPRs*;
- Prior to issuance of a *building* permit, have the *CP* deliver letters of assurance to the *AHJ* in the form of Schedule *CP-1* from the *CP*, Schedule A from the *Coordinating Registered Professional*, and Schedules B from each of the registered professionals of record (architectural, structural, mechanical, plumbing, fire suppression, electrical, geotechnical);
- Prior to issuance of the occupancy permit, have the *CP* deliver to the *AHJ* letters of assurance in the form of Schedule *CP-2* from the *CP*, Schedules C-A from the *Coordinating Registered Professional*, and Schedules C-B from the registered professionals of record (architectural, structural, mechanical, plumbing, fire suppression, electrical, geotechnical).

When the *Owner* chooses to use this alternate *building* permit process, he or she must understand the roles and responsibilities of the *AHJ*, *CP*, *CRP* and *RPRs*, and other participants of the *building* project. The *owner* often chooses this alternative process so that the *building* permit can be expedited, and does not realize there are other obligations of all the participants beyond the permit issuance. *CPs* are advised to have their contractual agreements with the *Owners* reflect the responsibilities and expectations as outlined in this Practice and Procedure Manual.

### 3.3 *Coordinating Registered Professional*

The obligations of the *CRP*, when part of the design team on a *CP* project, are the same as for a non-*CP* project. The *coordinating registered professional* is responsible for coordinating the design and *field review* of the *RPRs* for the *building* project in order to meet the objectives of the *building* code. This coordination must be undertaken throughout the duration of the design and construction process. Each individual *registered professional* is responsible for his or her own design and *field review*. The *coordinating registered professional* is responsible for coordinating the work of each *registered professional of record*, and for the review and checking of all design documents prepared by the *RPRs* for the project throughout the term of the project. The *coordinating registered professional* is the contact point between the *CP*, the *Owner*, and each *registered professional of record*, and, as such, is responsible for ensuring communication between all parties.

It is the *coordinating registered professional's* responsibility to ensure that all Letters of Assurance for the project are completed properly. The *coordinating registered professional* submits the signed and sealed Letters of Assurance to the *CP* on the *Owner's* behalf.

By signing Schedule A, the *coordinating registered professional* confirms that he or she

- will coordinate the design work and *Field Reviews* of all *registered professionals of record* retained for the project in order to ascertain that the design substantially complies with the *Building* code,
- will notify the *AHJ* immediately if he or she ceases to be retained on the project,
- will provide the *CP* with the Schedule B for each *registered professional of record* retained on the project, complete with the *CRP* initials on each page of the Schedules, and
- will notify the *CP* immediately of any *registered professional of record* who ceases to be retained on the project, even if the firm does not change.

The *coordinating registered professional* is responsible for ensuring that a *registered professional of record* for each discipline for which a *registered professional of record* is required completes a Schedule B and a Schedule C-B at the appropriate times during the project. The *coordinating registered professional* must initial all Schedules and submit them to the *CP*.

By signing Schedule C-A at the end of the project, the *coordinating registered professional* confirms that:

- he or she has fulfilled his or her responsibilities for coordination of *Field Review* by all the registered professionals of record,
- he or she has fulfilled his or her responsibilities for coordination of the functional testing of fire protection and life safety systems (see Division C Appendix A-2.2.7.3. for further details), and that
- these systems substantially comply with both the *Building* code and with the plans and supporting documents that were submitted with the *Building* permit application

Clause A-2.2.7.2.(1)(a), Sentence A-2.2.7.2.(2), and Article A-2.2.7.3. of Division C - Appendix A of the *Building* code provide further guidance on the roles and responsibilities of the *coordinating registered professional*.

### 3.4 *Registered Professional of Record*

The *registered professional of record* is the *registered professional* retained by the *Owner* for the provision of the major part of the professional services within a particular discipline. The *registered professional of record* is also responsible for the review and checking of all design documents prepared by any supporting registered professionals retained on the project **within that discipline**.

The *registered professional of record* for each discipline must complete Schedule B at the time of *Building* permit application. By signing Schedule B, the *registered professional of record*:

- Identifies the professional discipline (i.e., architectural, structural, mechanical, plumbing, fire suppression systems, electrical, or geotechnical) for which he or she is responsible (see A-2.2.7.3. of Appendix A of Division C - Section C for further details),
- Confirms that the design that he or she has prepared substantially complies with the requirements of the *building* code, except for construction safety aspects (see A-2.2.7.3. of Appendix A of Division C - Section 1.0 for further details),
- Confirms that he or she will take responsibility for the *field reviews* during construction within the respective discipline,
- Confirms his or her responsibility for determining that *field reviews* have been undertaken on the work of any supporting *registered professionals* retained on the project within that discipline, and
- Commits to notifying the *authority having jurisdiction* immediately if he or she ceases to be retained on the project, even if the firm that retained that *registered professional* is still on the project.

Except under special circumstances, only one Schedule B and one Schedule C-B should be completed and submitted by one *registered professional of record* for each discipline. Refer to the latest version of the "Guide to the Letters of Assurance in the BC *Building Code*" for further information.

If a staged *building* permit process is utilized for the project, the *RPRs* will submit his or her Schedule B at the appropriate Stage when his or her plans and supporting documents are complete and submitted to the *AHJ* for such stage.

Appendix A of Division C of the BC *Building Code* provides further guidance on the roles and responsibilities of registered professionals of record.

### 3.5 Contractor

The role of the contractor is to construct the *building* project in accordance with the contract documents provided by the *RPRs* and to request clarification of the intent where the requirements of the contract documents are not clear.

The responsibility for construction safety as described in Part 8 of Division B rests with the contractor.

### 3.6 Authority Having Jurisdiction (AHJ)

The responsibility of the *AHJ* is to provide the necessary administrative procedures to facilitate the *CP* Program, including review of the *building* permit submission documents, issuance of *building* permits, periodic monitoring of construction with the *CP*, witnessing of functional testing of fire and life safety systems, review of occupancy permit documents and issuance of occupancy permit.

The responsibility of the *AHJ* also includes the issuance of information bulletins from time to time in order to inform the *CPs*, *CRPs*, and *RPRs* of recent interpretations or policies by the *AHJ*.

The *AHJ* will provide easy access to key staff who have the authority to make decisions.

The *CP* will make arrangements to meet with the *AHJ* at the project site on a regular basis at critical times during construction. The frequency of such site visits will be determined by the *CP* and the *AHJ* based on the complexity of the project and type of activities that are underway.

Electrical, Plumbing and Gas Inspectors (where applicable) will provide the same level of monitoring of construction on *CP* project as they do on non-*CP* projects.

## 4.0 Responsibilities of the *CP*

### 4.1 Introduction

The *CP* is the main point of contact for the *AHJ* with respect to coordination of the various permits that are required for *building* projects. This permit coordination duty includes communication with the *owner* and the design team on specific *building* code issues and solutions and conveying any conditions or requirements of the *building* permit.

Levels of responsibility for substantial code compliance are multi-faceted and complex. The *building* code has three Divisions, 10 Parts, plus numerous other referenced standards.

Is the *CP* expected to be an expert on all these codes and referenced standards?

The simple answer is "of course not". However, the *CP* is expected to have a thorough knowledge of Division A; Parts 1 and 3 of Division B; and Division C. The *CP* is also expected to have working knowledge of certain standards such as NFPA 10, 13, 13R, 14, 80 and 96. In addition, the *CP* is expected to have knowledge of when to apply other referenced standards and when to obtain advice from other *RPs*.

The *CP* provides an independent review of the design and *field review* process as a "check and balance" to the services provided by the *RPRs* and the *CRP*, which is intended to replace monitoring that is traditionally carried out by the *AHJ*. The *CP* acts on behalf of the *AHJ* with respect to plan review and site review services. The introduction of a *CP* into a project substantially reduces the monitoring and reviewing activities of the *AHJ*.

## 4.2 Code Coordination from the CP's Point of View

The role of the CP is to provide "Code Coordination" for *Building* projects.

"Code Coordination", as defined in Schedule CP-1, includes the following tasks:

1. act on behalf of the *owner* as the *owner's* representative in matters involving *the authority having jurisdiction* in relation to the *building* permit, related project construction and related occupancy permit;
2. ascertain that the required *registered professionals of record (RPR)* for the project have been retained to provide *design* and *field review* in accordance with the "*Building Code*";
3. obtain the necessary letters of Assurance of Professional Design and Commitment for *Field Review* from the *registered professionals of record* for the project and deliver the originals of same to the *authority having jurisdiction* when applying for the *building permit* for the project;
4. obtain the other necessary documents required to support the *building* permit application and deliver same to the *authority having jurisdiction* when applying for the *Building* permit for the project;
5. apply for and obtain a *Building* permit for the project in accordance with the process as described in the *authority having jurisdiction's Building By-law*;
6. provide "design review" of the plans and supporting documents prepared by each of the *registered professionals of record* for the project;
7. ascertain that the *registered professionals of record* have incorporated in their plans and supporting documents, the requirements of the "*Building Code*" Division A; Division B Parts 1 and 3; and Division C;
8. ascertain that the Division A; Division B, Parts 1 and 3; and Division C "*Building Code*" requirements governing the project are compatible between the plans and supporting documents prepared by each *registered professionals of record*;
9. provide "site review" of the components of the plans and supporting documents prepared by each of the *registered professionals of record* for the project;
10. keep records of all "site reviews" by the "CP" and of any corrective action required and taken as a result of these "site reviews". Discrepancies noted during "site reviews" must be tracked and the resolution of these discrepancies noted such that a list of significant known unresolved discrepancies can be provided at the request of the *authority having jurisdiction*;
11. "monitor *field review* activities" of the *registered professionals of record*;
12. monitor and report on significant events and changes in the project;
13. submit a monthly summary progress report to the *authority having jurisdiction* during construction of the project;
14. consult with the *authority having jurisdiction* if any unresolved variances in interpretation of the "*Building Code*" arise between the "CP" and the *registered professionals of record*;



15. consult with the *authority having jurisdiction* if any unresolved issues with respect to the "*Building Code*" arise between the "*CP*" and the contractor.
16. review relevant shop drawings with respect to the requirements of Division A, Division B, Parts 1 and 3 and Division C of the "*Building Code*";
17. notify the *authority having jurisdiction* in a timely manner of any significant known, unresolved contraventions of the "*Building Code*" or *building* permit requirements;
18. obtain the necessary letters of Assurance of Professional *Field Review* and Compliance from the *registered professionals of record* or the project and deliver the originals of same to the *authority having jurisdiction* when applying for *occupancy* for the project;
19. obtain the other necessary documents required to support the occupancy application and deliver same to the *authority having jurisdiction* when applying for occupancy for the project;
20. apply for the occupancy approval for the project in accordance with the process as described in the *authority having jurisdiction's Building By-law*; and
21. apply the "*CP*" stamp to all relevant documents that are submitted to the *authority having jurisdiction*. Affixing his or her "*CP*" stamp to a document confirms that the "*CP*" has provided the relevant portion of "code coordination" applicable to that document.

Schedule *CP-1* includes the following defined terms:

"Design review" means the activities necessary to ascertain that the design of the project will substantially comply, in all material respects, with the requirements of Division A; Division B, Parts 1 and 3; and Division C of the "*Building Code*".

"Monitoring *Field Review* activities" means ascertaining that the "registered professionals of record" are providing *field reviews* as required by Div C, Part 2 of the "*Building Code*", and includes keeping records of the *field review* reports prepared by the "registered professionals of record". The *owner* will instruct each "*registered professional of record*" to highlight in his or her *field review* reports any significant variation from the documents accepted in support of the *building permit* and any corrective action as needed. The *CP* will review the variations highlighted in the *field review* reports and notify the *AHJ*, in a timely manner, of significant known unresolved variations from the documents accepted in support of the *building permit*.

"*Registered Professional of Record*" means a *registered professional* retained to undertake design work and *field reviews* pursuant to Schedules B and C-B of Subsection 2.2.7 in Division C of the "*Building Code*".

"Site review" means the activities necessary in the *CP's* professional judgment to ascertain that the construction of the project substantially complies, in all material respects, with the requirements of Division A; Division B, Parts 1 and 3; and Division C of the "*Building Code*" and the requirements of the *building* permit and monitoring for compliance with the development permit issued for the project.

The *CP*'s fundamental role is to ascertain that the *RPRs* have been retained for the design and *field review* of all code related aspects (Parts 1 to 7 inclusive and relevant portions of Part 9 in Division B) and to monitor that they are fulfilling their specific roles and responsibilities with respect to the project.

The role of the *CP* is different from the *RPs* of record in that traditionally the *CP* does not produce drawings that form part of the construction documents. They bring to the project a specialized knowledge of the *Building Code* in order to coordinate and monitor the implementation of such code requirements by the *RPRs*.

The *CP* does not relieve the *CRP* of their responsibility in the first instance for substantial compliance with all relevant Parts of the *Building Code*, and for coordination of all design documentation and *field reviews* by the *RPRs*. The *CP* has an authoritative role in the review and interpretation of items related to the requirements of Parts 1 and 3 in Division B of the *Building Code*. The *CRP* also carries this responsibility, but is expected that the *CRP* will confer with the *CP* in matters related to Parts 1 and 3 of Division B.

#### **4.2.1 Parts 4, 5, 6 and 7 of Division B**

The *CP* education course does not contain any sessions on Parts 4 through 7 of Division B in the *Building Code*. It is not a fundamental requirement of being a *Certified Professional* that the *CP* is an expert in any or all of these Parts of the Code. The *CP*'s responsibility for Code-related matters in Parts 4 to 7 is described below.

The *CP* is required to carry out a detailed review of the design to assure compliance with Parts 1 and 3 of Division B in the *Building Code*, and also has a responsibility for "Code Coordination" with Parts 4 to 7 of Division B.

It is not intended that the *CP* assume responsibility for the compliance of either the technical design or subsequent *Field Reviews* with Parts 4, 5, 6, or 7 of Division B. However, because the *CP* is effectively "standing in the shoes of the *AHJ*", the *CP* needs to provide a level of overview beyond simply obtaining drawings and Letters of Assurance. These overview activities should typically include:

- Providing "design review" of the drawings prepared by the *RPRs* as defined in Schedule *CP-1*;
- Reviewing the drawings to assess their general level of completeness and establishing that the requirements of Division C, Section 2.2 - "Administration" have been followed;
- Collecting the Checklist for Professional Structural Concept Review where applicable by the APEGBC Quality Management Guidelines and submit it to the *AHJ* with the *Building* permit application;
- Review the design documents of the specialty design disciplines under Parts 4, 5, 6 and 7 of Division B for compatibility with the Fire Protection, Occupant Safety, and Accessibility provisions of Part 3 and the general requirements of Parts 1, 2 and 3 of Division A;
- Submitting any peer review reports requested by the *AHJ*;

- Bringing to the attention of the *RPRs* any code coordination issues observed on site and checking that these are appropriately addressed; and
- Applying for and obtaining the necessary revisions to the *building permit* as required for design changes during construction and as documented by the appropriate *RPR(s)*.

In addition to the general overview function, the *CP* shall carry out the following specific tasks:

- Ascertain that the *CRP* has confirmed that the *owner* has retained *RPRs* to provide design and *field review* services;
- Collect signed and sealed plans and supporting documents from the *RPRs* and submit such plans and supporting documents to the *AHJ* with the *building permit* application;
- Collect letters of assurance (Schedules A, B) from the *CRP* for the confirmation of their design and commitment for *Field Review* and submit such letters to the *AHJ* at the appropriate stage of *building permit* application;
- Confirm that the documentation received from the *RPRs* meets the minimum requirements set forth in the *CP Practice and Procedures Manual* before making the *building permit* application;
- Review to confirm that the applicable items for the project have *RPRs* in place;
- Monitor the *field review* activities of the *RPRs* as defined in Schedule *CP-1*;
- Confirm that the appropriate trade, street occupancy, and hoarding permits have been taken out and review the arrangements with the contractor to call out the inspectors at the appropriate times;
- Report to and consult with the *AHJ* as described in Schedule *CP-1*;
- At the end of the project, collect letters of assurance (Schedules C-A and C-B) from the *CRP*; and
- Collect other occupancy permit submission documents and submit to the *AHJ*.

#### 4.2.2. Part 10 - Energy and Water Efficiency

The responsibility of the *CP* is to collect the appropriate documents to verify substantial compliance to the requirements of Part 10 from the design team and submit them to the *AHJ* along with the *building permit* application documents.

### 4.3 Use of *CP* Stamp and Professional Seal

The *CP* will apply his or her *CP* stamp, complete with the *CP's* initials and date, to the following documents:

- Every drawing from the *CP*, *CRP* and *RPR*, that is submitted for *building permit*;

- Every page of the letters of assurance from the *CP*, *CRP* and *RPR* that are submitted for *Building* permit;
- The first page of other *building* permit submission documents (e.g., detail books, door schedules);
- The first page of drawings submitted for trade permits (plumbing, fire suppression and electrical permits)
- The first page of each alternative solution request form; and
- The first page of other required correspondence to the *AHJ*.

The purpose of the *CP* stamp is to signify that these documents form part of the *CP* Project and shall not constitute an approval of design services rendered by others.

The *CP* will apply their professional seal as prescribed by their respective professional association as described below:

- Section 20 (9) of the Engineers and Geoscientists Act requires that professional engineers apply their professional seal, signature and date to documents as follows:

“A member or licensee receiving a seal or stamp under this section must use it, with signature and date, to seal or stamp estimates, specifications, reports, documents, plans or things that have been prepared and delivered by the member or licensee in the member’s or licensee’s professional capacity or that have been prepared and delivered under the member’s or licensee’s direct supervision.”

- Section 77 of the Architect's Act require that architects apply their professional seal, signature and date to documents as described below:
  - “An architect must apply a seal, with signature and date, to letters of assurance, certificates, drawings and specifications prepared by or under the architect's supervision, direction or control if the architect practices architecture
    - (a) as a member of the institute holding a current certificate of practice
    - (b) as a sole proprietor or partner of an architectural firm, or
    - (c) on behalf of an architectural corporation as a continuing employee or shareholder of the corporation”

The *CP* will apply his or her professional seal to the following documents:

- at least one page of *Building Code* checklist or *Building Code* report that is prepared by the *CP*;
- every page of the letters of assurance prepared by the *CP*;
- the first page of alternative solution request forms that are prepared by the *CP*;
- for *CPs* who are professional engineers - every page of the code compliance drawings prepared by the *CP*; and
- for *CPs* who are architects - code compliance drawings do not require a professional seal by the *CP*.

#### 4.4 Delegation of Responsibility

When the *CP* Program was first implemented back in the early 1980s, it was envisioned that the *CP* would personally review the drawings and supporting documents for the projects in which he or she was engaged. It was also envisioned that the *CP* would personally liaise with the *AHJ* and the rest of the design and construction team over the course of the project. As the business aspect of *CP* services developed, it became increasingly common for the *CP* to enlist the aid of non-*CPs* and in some cases, *non-Registered Professionals*, to aid them in their activities. Although this practice may be acceptable, the following general principles apply:

- The *CP* is the primary point of contact for the project in the eyes of the *AHJ*. Whenever a code issue arises where the *CP* requires input from the *AHJ*, the *CP* must personally be at the forefront of all communications.

It is acceptable for non-*CP* staff to make non-code related inquiries to the *AHJ* in regards to the project. For example, if information is required about the status of a permit application and what, if any, review groups have outstanding items, non-*CP* supporting staff are free to pursue this information.
- A *CP* can delegate activities to others, but cannot delegate his or her ultimate responsibility for the obligations described in Schedule *CP-1*.

Guidelines regarding delegation of the *CPs* authority during construction are provided in Article 7.4.1.1. of this Manual

## 5.0 Responsibilities During *Building* Design Development

### 5.1 Introduction

The *CP* must review appropriate drawings and supporting documents at various stages of design development to ascertain substantial compliance with the *building* code for documents to be submitted for *building* permit. The *CP* must also assist the design team through provision of *Building Code* interpretations and clarifications.

The *CP* must be aware of the many interdisciplinary aspects of the *building* code:

- Part 3 of Division B directly or indirectly has several references to other Parts of the *Building Code* including Parts 4, 5, 6, 7, 9 and 10 of Division B;
- Division B, Part 3 requirements often involve several disciplines beyond architectural design, including structural, mechanical, plumbing, fire suppression, electrical, geotechnical, landscape, etc.; and
- Division C, Appendix A-2.2.7, identifies the interdependency and roles of *registered professionals of record* for fire and life safety systems.

The responsibility that each component design substantially complies with the *building* code rests with the *RPR* for such component (i.e., the architect is responsible for architectural components, structural engineer for structural components, etc.).

The *CP* can reasonably rely upon the *RPRs* for substantial code compliance of their designs; however, the *CP* provides an independent review of plans and supporting documents prepared by the *RPRs* as a “check and balance” to ascertain that the design substantially complies with Part 3 of Division B.

Confirmation that the design has been coordinated by the *CRP* is documented by the letter of assurance Schedule A.

Confirmation that the design substantially complies with the *building* code is documented by the series of letters of assurance Schedule B from the various *RPRs*.

Confirmation that the *CP* has undertaken “Code Coordination” of the design is documented by the letter of assurance Schedule *CP-1*.

## 5.2 Review of Plans and Supporting Documents

### 5.2.1 Architectural

The *CP* must review the architectural plans and supporting documents for the following:

- Reference to the *building* code in effect;
- General level of completeness and adequacy to provide sufficient information for construction and instructions as outlined in Division C, Subsections 2.2.2. and 2.2.3. of the *building* code; and
- Detailed review to ascertain substantial compliance to Division A; Parts 1 and 3 of Division B; and Division C in the *Building* code; and review for “Code Coordination” with other disciplines, including alternative solutions.

### 5.2.2 Structural

The *CP* must review the structural plans and supporting documents for the following:

- Reference to the *building* code in effect;
- General level of completeness and adequacy to provide sufficient information for construction and instructions as outlined in Division C, Subsections 2.2.1. and 2.2.4.;
- Review for “Code Coordination” with other disciplines, including alternative solutions;
- Provision of basic design criteria for live, dead, wind and seismic loads;
- Reference the geotechnical report provided; and
- Criteria relative to rebar concrete cover.

### 5.2.3 Mechanical, Plumbing and Fire Suppression

The *CP* must review the mechanical, plumbing, fire suppression drawings and supporting documents for the following:

- Reference to the *Building* code in effect;
- General overview as outlined in Division C, Subsections 2.2.3., 2.2.6. of Book 1 of the *Building* code and Section 2.2 of Division B of Book 2 of the *building* code as they pertain to Part 3 of Division B;
- Review to ascertain that the appropriate design standards have been utilized (e.g., NFPA 10, 13, 13R, 14, 96);
- Review for “Code Coordination” with other disciplines, including alternative solutions;

- Review sequence of operations of fire and life safety systems;
- Review penetrations of fire-resistance rated assemblies for required fire dampers and fire stop systems;
- Ascertain that the standpipe hose connections are indicated and correctly located on both the plumbing/sprinkler drawings and the architectural drawings;
- Review the fire department connection location;
- Ascertain that the mechanical systems for high *building* requirements are incorporated into the drawings and supporting documents; and
- Review that the drawings indicate fire rated duct enclosures and check that services are not indicated in exits unless they serve such exit.

#### 5.2.4 *Electrical*

The *CP* must review the electrical drawings and supporting documents for the following:

- Reference to the *building* code in effect;
- General overview as outlined in Division C, Subsection 2.2.3. of the *building* code, as they pertain to Part 3 of Division B;
- Review to ascertain that the appropriate design standards have been utilized (e.g. CAN/ULC-S524);
- Review for “Code Coordination” with other disciplines, including alternative solutions
- Review for placement of fire alarm devices and general design criteria (i.e. Subsections 3.2.4 and 3.2.6 of Division B);
- Review for location of exit signs for consistency with code compliance drawings;
- Review for coordination of emergency lighting and power provisions; and
- Review the sequence of operation of fire and life safety systems.

#### 5.2.5 *Specialist Consultants*

The *CP* must review the specialist consultants’ (e.g., geotechnical, landscape, interior design) drawings and supporting documents for the following:

- General overview to determine the impact on the *building* permit application (e.g., soil anchors across property lines, flame spread rating of interior wall finishes); and
- Review for “Code Coordination” with other disciplines, including alternative solutions.



### 5.2.6 *Alternative Solutions*

Alternative solutions, formerly known as “equivalencies”, allow for flexibility in *building* construction. They provide the design team with a means to employ innovative construction materials and design methods in their *building* projects. Frequently, specialty *RPs* are called upon to prepare alternative solution submissions to the *AHJ* for review and acceptance. In these instances, the alternative solution must be reviewed and stamped by the *CP* prior to submission to the *AHJ*.

The *CP* must review an alternative solution submission for the following:

- Correct project address;
- Proper project description;
- Overall check that the requirements outlined in Subsections 2.3.1. and 2.3.2. of Division C are incorporated into the submission;
- Correct objective and functional statements; and
- Confirm that the alternative solution has been incorporated into the drawings and supporting documents.

### 5.2.7 *Code Compliance Drawings*

The Code compliance drawings are the primary tool that the *CP* must prepare in advance of the *building* permit submission. The code compliance drawings are also a useful to the design team to aid in development of an approach to code compliance of the *building* design.

All information on the drawings must be legible and clearly presented. The physical drawings must be of a size that can be readily reviewed and reproduced.

The typical code information to be documented on the code compliance drawings is listed below. Depending on the simplicity of the project some of these may not be required.

- Project address
- *Building* permit number (if available)
- Development permit number (if applicable)
- *Building* Code data sheet
- Occupancy classification(s)
- Firewalls
- Classification for Subsection 3.2.2 of Division B
- Spatial separation analysis
- Fire department access route location(s), fire department response point(s)
- Fire separations (clearly distinguishable and including a legend)

- Fire resistance ratings (clearly distinguishable and including a legend)
- Occupant loads
- Exits
- Exit capacity
- Exit remoteness
- Exit exposure
- Travel distance
- Siamese connections
- Standpipe connections
- Accessibility
- Washroom fixture analysis
- List of proposed alternative solutions and fallback solutions
- Identification on the plans of the location where alternative solutions apply

In addition to this information, it is beneficial if any “contentious” Code issues that require discussion are clearly identified on the drawings. This will aid in resolution of problem areas in a timely fashion.

## 6.0 Responsibilities of the *CP* During the *Building* Permit Application Stage

### 6.1 Introduction

It is the responsibility of the *CP* to take a lead role in collecting all of the required *building* permit submission documents and amalgamating them into a complete *building* permit submission package. The *CP* will review the *building* permit submission documents prior to making the *building* permit application.

The *CP* must also include with the permit application evidence that he or she holds Professional Liability insurance in the amount of not less than \$1,000,000 per claim.

### 6.2 Permit Application Procedure

The *CP* and *AHJ*'s *Building* permit processing staff together are responsible for identifying the project specific required clearances.

The *AHJ* is responsible for an overall cursory examination of the code compliance drawings, the completeness of the submitted documentation, the verification of the required departmental clearances and the issuance of the *building* permit and associated documentation.

### 6.3 Documentation Submission Requirements

The *CP* must submit the *building* permit application with all the related drawings and documents required for the *CP building* permit application. The *building* permit application and all supporting documents are required to bear the stamp of the *CP* as outlined in Section 4.3. The submission requirements are as outlined in the "*Certified Professional Program - Building Permit Application Submission List*" by each *AHJ*.

## 6.4 Staged *Building* Permits

In order to expedite the *building permit* process, the *AHJ* may issue a staged *building permit*. The *AHJ* will commonly authorize up to three stages. Typical stages include excavation and shoring; foundation to grade; and remainder of the work. Due to the complexity of some *projects*, variation of stages or additional stages may be authorized by the *AHJ*. The *CP* and *AHJ* should determine the number of stages prior to the issuance of the *building permit*.

For staged *permit* applications the *CP* will need to complete and submit, to the *AHJ* the "*Certified Professional Program - Authorized Staged Construction Form*" and the "*Certified Professional Program - Development Permit Confirmation Letter*" or "*Certified Professional Program - Development Permit Confirmation of Changes Letter*", as applicable, for each stage.

For staged *permit* applications, the drawing and document submission for each stage must be able to stand alone as a complete package. Each stage must be accompanied by a separate "*Certified Professional Program - Authorized Staged Construction Form*". The *CP* and *AHJ* will jointly confirm the submission requirements at the code compliance meeting.

## 7.0 Responsibilities of the *CP* during the *Building* Construction Stage

### 7.1 Introduction

Issuance of the *building* permit is typically followed by immediate commencement of construction. At this time, the *CP*'s role transitions from monitoring the design process to monitoring the construction process. The *CP* continues to be the primary liaison between the design team and the *AHJ* in the resolution of code compliance issues.

The *CP*'s responsibilities during the construction stage include the following:

- The *CP* and *CRP* will schedule an initial site meeting with all consultants and prime contractors to clarify each party's roles and responsibilities.
- Prior to construction the *CP* will establish with the *Building* Official a protocol of anticipated joint *field reviews* leading up to the City Demonstration [refer to Subsection 8.2.3. of this manual].
- *Field review* reports from all consultants shall be forwarded to the *CP* and *CRP* so that both the *CP* and *CRP* can monitor the *field reviews* by the consultants to determine if any code related issues arise.
- The *CP* and *CRP* will prepare and submit monthly summary reports of the project construction progress to the *AHJ*. These reports will identify any major code-related issues that have arisen during construction.
- The *CP* has an ongoing obligation to consult with the *AHJ* on any unresolved By-law issues or interpretation variances, as outlined in Schedule *CP-1*.

### 7.2 Trade Permits

The *CP* shall confirm with the contractor that all required electrical, sprinkler, plumbing and gas trade permits are obtained prior to the applicable trade commencing work. The *CP* shall review the electrical, plumbing and fire suppression drawings that are submitted for trade permits to determine if there are any variations from the *building* permit set of drawings that would conflict with the original design intent or the accepted alternative solutions.

The *CP* must advise the contractor that prior to submitting any drawings to the *AHJ* for trade permits, the drawings must be sent to the *CP* for review and for application of the *CP* stamp.

### 7.3 Construction Safety

Construction safety is the responsibility of the contractor and their construction safety officer. The *CP* should not assume responsibility for, nor give instructions with respect to, worksite safety.

The *CP*'s responsibilities with respect to Part 8 of the *building* code (Safety Measures at Construction Sites) is limited to ascertaining that the construction safety officer and construction safety plan are in place where required.

### 7.4 Field Reviews during Construction Conducted by the *RPRs*

The responsibility for ascertaining that the construction substantially complies with their plans and supporting documents rests with each *RPR* for their relevant project components.

The responsibility for constructing the project in accordance with the contract documents rests with the contractors.

If required by the AHJ, the *CP* will submit final design drawings to the *AHJ* for their records prior to issuance of the *occupancy permit*. Refer to Section 8.5.

#### 7.4.1. Site Reviews during Construction Conducted by the *CP*

The responsibility of the *CP* during construction is to provide "Code coordination" of the *field reviews* that are performed by the *RPRs*. Furthermore the *CP* provides his or her own site reviews to supplement the *field reviews* that are provided by the *RPRs*, as a secondary check and balance to ascertain that the construction substantially complies with Division A; Parts 1 and 3 of Division B; and Division C of the *building* code. The *CP*'s site reviews are undertaken in lieu of the reviews by the *AHJ*.

The *CP*'s site review is an overview of the Division B, Parts 1 and 3 requirements, whereas the *RPRs* provide a detailed technical review of components in their particular discipline. Each *RPR* is required to keep a record of each *field review* and of any corrective action taken as a result of the *field review* (see *building* code Sentence 2.2.7.3.(2) of Division C).

The difference in the scope of site review by a *CP* and a *field review* by an *RPR* is illustrated in the following examples:

- The *CP* reviews guards relative to location, height, and climbability in conjunction with the architect; The architect (*RPR*), in conjunction with the structural engineer or speciality engineer, reviews guards for installation and structural capacity; and the architect (*RPR*) and *building* envelope practitioner review exterior guard installation details relative to technical *building* envelope details.
- The *CP*, in conjunction with the architect (*RPR*), reviews fire separations (e.g., shaft walls, party walls, public corridors, etc.) and closures (e.g., fire doors, shutters, glass, firestopping, etc.).

The *CP* takes a lead role in the coordination of the functional testing of the fire and life safety systems in cooperation with the *CRP* (refer to Schedule A for the role of the *CRP*).

Confirmation that the *field reviews* and the functional testing of the fire and life safety systems have been coordinated by the *CP* and *CRP* is documented by the letters of assurance Schedules *CP-2* and *C-A*.

Confirmation that the *field reviews* have been undertaken to ascertain that the construction substantially complies with the *building* code and supporting documents is documented by the series of letters of assurance Schedules *C-B* from the various *RPRs*.

Confirmation that the *CP* has undertaken “code coordination” of *field reviews* by the registered professionals is documented by the letter of assurance Schedule *CP-2*.

#### **7.4.1.1 Extent to Which CP Site Reviews May be Delegated**

When the *CP* program was originally developed in the early 1980s, it was envisioned that the *CP* would be personally conducting the critical code-related site reviews on the project plus personally monitoring *field reviews* by other *registered professionals of record*. As the business aspect of the *CP* services has developed, it has changed so that some site reviews are being undertaken by non-*CPs* and in some cases non-registered professionals. Although this procedure may be acceptable, the following guidelines outline the extent to which non-*CPs* and non-registered professionals can conduct site reviews:

- It is expected that the *CP* or his or her delegate will be present on site a minimum of once per month;
- The *CP* is expected to have an overall knowledge of the code-related site reviews conducted by his or her staff;
- It is expected that the *CP* will be made aware of any changes, deviations, etc. by his or her delegate;
- The *CP* will make arrangements to meet with the *Building* Official at the project site on a regular basis at critical times during construction (i.e., first storey framing, first stair handrail, etc.). The frequency of such site meetings will be determined by the *CP* and the *building* Official based on the complexity of the project and the type of activities that are underway; and
- A *CP* can delegate site review activities to others, but cannot delegate his or her ultimate responsibility for the obligations described in Schedule *CP-1*.

Specific scenarios regarding delegation of site reviews are outlined in the following sections.

#### ***7.4.1.2 Delegation of CP Detailed Site Reviews to other CPs***

The *CP* may delegate site reviews to another *CP* within their same firm. Delegation to *CPs* from outside of their own firm will only be permitted under special circumstances (e.g. holidays or illness of the *CP* of record). The *CP* of Record shall inform this other *CP* of any special design characteristics of the project. The *CP* of Record shall maintain overall knowledge of the site review status. The *CP* of Record will notify the *AHJ* or any delegations of *CP* site review responsibilities to other *CPs*.

#### ***7.4.1.3 Delegation of CP Detailed Site Reviews to Non-CPs***

Many architectural and engineering firms have non-*CP* staff members who routinely conduct site reviews on *projects*. If a *CP* intends to delegate any site review to a non-*CP*, the *CP* must be confident the reviewer is knowledgeable and experienced in the particular aspects of the *building* components that are to be reviewed. The *CP* must not delegate site reviews to non-*CPs* outside his or her firm.

#### ***7.4.2 Field Review Conducted by RPRs***

Each *RPR* is expected to conduct *field reviews* of the *building* components for which he or she is responsible as outlined in the submitted Schedule B. The *field reviews* by each *RPR* are an integral part of the *field review* process and are independent of the site review responsibilities of the *CP*.

The *RPRs* are expected to conduct their *field reviews* prior to the site review by the *CP* or *CP* staff.

The *CP* can reasonably rely upon the *RPRs* to ascertain that the technical aspects of their designs have been constructed in substantial conformance with their plans and supporting documents.



### 7.4.3 CP's Monitoring of Field Reviews Undertaken by the Project Team

Prior to construction the *CP* and *CRP* shall establish a process for monitoring the submission of *field review* reports. This includes having the *RPRs* provide a written *field review* report of each *field review* and transmitting this report to both the *CRP* and the *CP* immediately after such *field review*. The *CP* will review these reports to determine if there are any Part 3 Code-related issues have arisen. The *CP* will then monitor - and initiate as necessary - any corrective action necessary to address such Part 3 code-related issues. Should corrective action not be followed through, the *CP* will notify the *AHJ* for appropriate action. If necessary, the *CP* may have to recommend to the *AHJ* that a stop work order be placed on the project.

The *CP's* monthly summary reports will include the following details:

- Project name;
- Project address;
- Project *building* permit number;
- Date of monthly report;
- Detailed description of the job progress to date;
- Detailed listing of shop drawings that have been reviewed by the *CP* for the month;
- Listing of any critical code issues that were identified for the month;
- Listing of any changes to the design that warrants a minor amendment to the DP or BP;  
and
- Status of minor amendments to DP and BP (if applicable).

The *CP* can reasonably rely upon the expertise of the other *RPRs* on the project to conduct the appropriate *field review* for construction elements related to Parts 4, 5, 6, 7 and 10 of Division B. If, in the opinion of the *CP*, the *field review* reports provided by the other *RPRs* seem to be insufficient or inappropriate for the particular stage of construction, the *CP* shall review these concerns with the *CRP* and the *RPR* in question. In the event that a satisfactory resolution is not forthcoming, the *CP* shall notify both the *owner* and the *AHJ*.

The frequency of *field reviews* by the *RPRs* and site reviews by the *CPs* is entirely at the discretion of each individual *RPR* and *CP* and can vary from project to project to address various factors:

- Level and nature of risk, complexity, unknown conditions and duration of the construction,
- Standard of practice for the type and nature of work to be reviewed,
- Detail of architectural and engineering documentation prepared for the project,
- Experience, reputation and method of selection (e.g., public tender, pre-qualified bidders or negotiated) of those constructing the project (i.e. builders), and
- Number of deficiencies found early in the project.

Table 1: Sample field review Components

Project Component	Applicable RPR (field review)	CP (Site Review)
Excavation & shoring	Primary responsibility	For the purposes of preparing the monthly report
Dampproofing		N/A
Drain tile		N/A
Plumbing site servicing		N/A
Electrical site servicing		N/A
Backfill		N/A
Structural (prior to each pour)		For the purposes of preparing the monthly report
Interior walls and closures		Code coordination per Schedule CP-1
Rough in plumbing		Code coordination per Schedule CP-1
Rough in sprinklers		Code coordination per Schedule CP-1
Rough in mechanical		Code coordination per Schedule CP-1
Rough in electrical		Code coordination per Schedule CP-1
Exterior wall system		Code coordination per Schedule CP-1
Firestopping of penetrations		Code coordination per Schedule CP-1
Insulation		Code coordination per Schedule CP-1
Drywalling		Code coordination per Schedule CP-1
Finish plumbing		For the purposes of preparing the monthly report
Finish mechanical		For the purposes of preparing the monthly report
Finish electrical		For the purposes of preparing the monthly report
Architectural finishes/millwork		Code coordination per Schedule CP-1
Commissioning	Code coordination per Schedule CP-1	
Consultant demonstration	Supporting role	Primary responsibility
City demonstration		Primary responsibility

Notes:

1. The role of the *CRP* is not reflected in this table; refer to 3.3 for further details.
2. Refer to 4.2.2 for a discussion of Parts 4, 5, 6, and 7.
3. Refer to 7.4.1.1 for an explanation of when *CP* site reviews can be delegated.

Table 1 is provided as a sample guide for *field reviews* by the *RPRs* and site reviews by the *CP*. Each project is unique and may warrant variation from this sample guide. It is at the discretion of each *RPR* and each *CP* to determine the appropriate frequency of *field reviews* and site reviews to suit the unique circumstances of each project.

## 7.5 Review of Shop Drawings

The *CRP* has overall control over the distribution of shop drawings. The *CP* will identify to the *CRP* which shop drawings he or she wants to review. The *CRP* should keep the *CP* informed as to the status of shop drawings in the event that the *CP* considers it necessary to review certain shop drawings that were not included in their original list. The *CP* will review the relevant shop drawings with respect to Division A; Division B Parts 1 and 3; and Division C requirements.

Table 2 provides a sample of shop drawings and related documents review that can be used as a guide to identify roles and responsibilities of the various participants (as applicable to the project, including alternative solutions).

Table 2: Sample Review of Shop Drawings

	<i>RPR</i>	<i>CRP</i>	<i>CP</i>	Remarks
<b>Architectural</b>				BCBC reference #s
Exterior cladding systems	X	X	X	3.1.5, 3.2.3
Windows	X	X	X	3.2.3, 3.3.1.19.
Fire shutters	X	X	X	3.1.8
Fire doors and frames	X	X	X	3.1.8
Hardware	X	X	X	3.1.8, 3.4.6.16.
Elevators	X	X	X	3.2.6, 3.5.2.1, 3.5.4.1. ,3.8.3.19
Escalators	X	X		
Architectural finishes	X	X	X	3.1.13.2., 3.4.4.2.(2)
Millwork	X	X		
Handrails/guards	X	X	X	3.3 and 3.4
Firestopping	X	X	X	
Fire and sound separation assemblies	X	X	X	At discretion of <i>CP</i>
Interior signage	X	X	X	
<b>Structural</b>				
Structural steel	X	X		
Manufactured wood products	X		X	For ULC listed assemblies
Roof trusses	X	X		
Precast concrete	X	X		
Concrete mix designs	X			
Concrete test reports	X			
Unbonded post tensioned slabs	X			
<b>Mechanical</b>				
HVAC equipment	X	X		
Hot water tanks	X	X		
Boilers and furnaces	X	X		
Fire dampers	X	X		
Grills & Diffusers	X	X		
Balancing reports	X	X		

Table 2: Sample Review of Shop Drawings (Cont'd)

	<i>RPR</i>	<i>CRP</i>	<i>CP</i>	Remarks
<b>Fire Suppression</b>				BCBC reference #s
Sprinklers	X	X	X	Appropriate system design, etc.
Hydraulic calculations	X	X	X	Stamp only
Firestopping service penetrations	X	X	X	
Structural capacity	X			
<b>Plumbing</b>				
Plumbing fixtures	X	X		
Plumbing equipment	X	X		
Backflow prevention devices	X	X		
Pumps	X			
Firestopping service penetrations	X	X	X	
Structural capacity	X			
<b>Electrical</b>				
Fire alarm system	X	X	X	3.2.4 and 3.2.6
Fire alarm graphic annunciator	X	X	X	Coordinate with fire department
Exit signs	X	X		
Lighting fixtures	X	X		
Emergency lighting	X	X		
Emergency generator	X	X		
Electric heating	X	X		
Firestopping service penetrations	X	X	X	
Structural capacity	X			

## 7.6 Changes During Construction

The *CRP* must coordinate design changes during construction with the *RPRs* and advise the *CP* to review for code issues/implications. The *CRP* must confirm whether the changes are significantly sufficient that DP minor amendments and/or BP revisions are required, as described below. If BP revisions are required the *CRP* must collect the appropriate documents from the *RPRs* and submit to the *CP* for submission to the *AHJ*. Delay in obtaining required DP minor amendments and/or BP revisions may result in a stop work order until the issues are resolved.

It is recognized that changes can and do occur during construction. Changes can be of varying significance with respect to the Code and/or the issued development permit. The *CP*, in consultation with the *CRP*, must determine whether a change warrants further discussion with the *AHJ*. Major design/construction changes will require consultation with the *AHJ* prior to proceeding and may lead to a BP revision, request for acceptance of an alternative solution and/or a required DP amendment. Construction and/or occupancy may be delayed where these issues are not identified and dealt with at the appropriate stage.

For guidance, the following is a list of items that might be considered minor design/construction changes:

- Re-location of a suite entry door within a public corridor;
- Minor interior re-configuration of the suite (without changing the permitted use); and
- Floor finishes (except for enclosed balconies).

For guidance, the following is a list of items that might be considered major design/construction changes:

- Permitted use;
- *building* exterior (e.g., doors, windows, siding, rooftop units, venting, change in overall *building* form or dimensions including height);
- Floor area (e.g., mezzanine, loft, storage rooms, additional floors, enclosing balconies);
- On-site parking, loading and bicycles - e.g., configuration, dimensions and vertical clearances (e.g., parking added or deleted, layout changes);
- Number of dwelling units or tenancies.

## 7.7 Public Access to Display Suite(s) and Sales Centre within a *Building* Under Construction

An *owner* may require access by the public to a *building* that is under construction in order to view a display suite(s) or sales centre within the *building*. A separate *building* permit is not required in this situation. The *CP* and the *owner* will coordinate the safety provisions with the contractor and the *AHJ*. The contractor is to implement and enforce the necessary safety procedures required to allow access by the public.

Not all of the fire and life safety systems are required to be completed. However, the following safety principles are applicable to a display suite(s) or sales centre within a *building* under construction:

- Provide safe access to and egress from the proposed display area(s) (e.g., handrails, guards, etc.), including access for persons with disabilities on ground floor suites. If the display suite(s) or sales centre is located above the ground floor the *CP* will discuss with the *Building* Official the appropriate level of accessibility;
- Provide overhead protection if access to or egress from the proposed display area(s) is beneath or adjacent to overhead construction activities;
- Provide hoarding or similar physical protection to access the display area(s) and to separate and secure the display area(s) from the construction zones;
- Provide "Construction Zone - Do Not Enter" signage to separate the display area(s) from the construction zones;

- Provide temporary emergency lighting and temporary signage (including exit signage) within the display area(s) providing access and egress for the public; and
- Post a graphic plan within the display suite(s) or sales centre to indicate the egress route(s).

## 8.0 Responsibilities of the *CP* during the *Building* Occupancy Stage

### 8.1 Introduction

The construction process invariably gives way to the occupancy process. Any new construction or a change of use requires a new occupancy permit. In addition, the issuing of this permit shall not relieve the *owner* or occupier from the responsibility of complying with the Zoning and Development By-law or any other pertinent By-law, Acts or Regulations. This permit is not a representation or warranty that the By-laws of the Local Government or other enactments have been complied with, since resources at the *AHJ* only permit random review and inspection. The *AHJ* will accept no responsibility or legal liability should any person suffer loss, injury or damage as a result of the *building* not complying with relevant local By-laws and the *building* code. Accordingly, persons should make such independent investigations or inquiries as they see fit to determine whether the *building* complies with all relevant local By-laws or enactments.

The purpose of this section is to provide guidelines for the preparation and submission of supporting documents to the *AHJ* for the occupancy permit under the *Certified Professional* Program.

There are various types of occupancy permits available:

- Base *building* shell occupancy permit (e.g. non-residential *buildings* where tenant improvements are not part of the base *building* permit);
- Occupancy permit for a portion of the *building* that is complete and base *building* shell occupancy permit for the unfinished portion (e.g. residential tower where penthouse units not completed, or mixed-use *building* where lower floor(s) commercial units are not completed);
- Occupancy permit for a portion of the *building* that is complete without shell occupancy for the remainder (e.g. major complex with multiple occupancy components one or more of which may be occupied safely while work continues on the balance of the *building* (refer to Section 8.6);
- Occupancy permit with Work Required (e.g. safe to occupy with minor *building* code work still required) [refer to Section 8.4]; and
- Occupancy permit when the entire *building* is safe to occupy and substantially complete (e.g. all required *building* code work is complete).

## 8.2 Fundamental Principles and Mechanisms for Obtaining an Occupancy Permit

The *CP* takes the lead role, in cooperation with the *CRP*, for the “Code Coordination” aspects of the occupancy permit procedures including the coordination of the functional testing of the fire and life safety systems.

*RPRs* must only release their letters of assurance when all elements are substantially complete. Both APEGBC and AIBC have strict policies that a *RPR* must not issue his or her letters of assurance (Schedule C-A, C-B) until the defined portion of the project as described in the occupancy permit application is substantially complete.

The *CP* must not request the *AHJ* Coordinated Fire and Life Safety Systems Demonstration (*AHJ* Demonstration) until the Consultant Coordinated Fire and Life Safety Demonstration (Consultant Demonstration) has been satisfactorily completed as described in Appendix A-2.2.7.3 of Division C in the *building* code.

All applicable Schedules C-B must be completed by the *RPRs* and collected and initialled by the *CRP*. The *CP* must not release a Schedule CP-2 until the receipt of the Schedule C-A from the *CRP* plus all the Schedules C-B from the *RPRs*.

Minor construction deficiencies are common on all construction projects. Where accepted by the *AHJ*, an “Occupancy Permit with Work Required” (or “Provisional Occupancy Permit”) can be issued to cover minor work. The *CP* must confirm in writing to the *AHJ* once all “Work Required” has been substantially completed. [Refer to Section 8.4 on outstanding non-life safety issues]

Under the *CP* program, the mechanism for obtaining an occupancy permit has been altered from the method described in the *building* code Division C Appendix Reference A-2.2.7. in order to reduce the pressure on *RPRs* to release their Schedule C-B prematurely. This alternate method includes seven steps as follows:

1. Test Protocol - the *CP* prepares and submits to the *AHJ* a project specific test protocol that will be used for the functional testing of the fire and life safety systems.
2. Consultant Demonstration - trade contractors demonstrate to the *CP*, *CRP* and *RPRs* that the fire and life safety systems are functional and operational as designed.
3. *AHJ* Demonstration - *CP* coordinates the *CRP*, *RPRs* and trade contractors in demonstrating to the *AHJ* representatives (i.e., *building* Official/Plumbing/Sprinkler/ Gas, Electrical Inspectors, and Fire Prevention Officer) that the fire and life safety systems are functional and operational as designed.
4. Consultant Final - the *CP*, *CRP* and *RPRs* conduct final *field reviews* and prepare deficiency lists. The trade contractors complete the work identified in the deficiency lists. The contractors responsible for the applicable trade permits must obtain final clearance cards from the applicable *AHJ* Trade Inspectors (i.e., plumbing/sprinkler/ gas and electrical) and submit a copy to the *CP*.
5. Prior to Final *AHJ* Clearance, the *CP* is required to submit all applicable occupancy permit submission documents.

6. Final *AHJ* Clearance - the *CP* will undertake a final review with the *Building* Official. The *CP* will confirm with the Occupancy Clerk that other City Departments and Government agencies (e.g., Ministry of Environment, Ministry of Highways, BC Safety Authority, Health Authority, etc.) have provided their final clearance, as appropriate.
7. Once all Departments have cleared, the *AHJ* will issue the occupancy permit.

Steps 3, 4, 5 and 6 can happen simultaneously.

The above steps form an overview of the Occupancy Permit procedures.

### **8.2.1 Test Protocol**

The *CP* will deliver to the *AHJ* a project-specific test protocol for the functional testing of the fire and life safety systems. The *CP* will submit this test protocol to the *AHJ* 48 hours prior to the *AHJ* Demonstration.

The test protocol will include the following features:

- Date and time for the Consultant Demonstration
- Required attendees for the Consultant Demonstration
- Required status of completion of the fire and life safety systems
- Required equipment for the functional testing
- Description of the intended operation of the fire and life safety systems
- Required equipment for the functional testing
- Description of preliminary set up for the functional test
- Description of the procedure for the functional test
- Description of the expected integration and operation of the various fire and life safety systems (fire alarm sequence, fire alarm matrix, mechanical fan operation, etc.)

Note that for a high *building* with scissor stairs, the test protocol must include a smoke test of the scissor stairs to demonstrate that the smoke does not leak between the adjacent stair shafts. This test should be completed prior to the *AHJ* Demonstration. The *Building* Official should attend this test.



### **8.2.2 Consultant Demonstration**

The *CP*, in conjunction with the *CRP*, shall coordinate and conduct a Consultant Demonstration of the functional testing of the fire and life safety systems in accordance with the established project-specific test protocol. The trade contractors are to fully demonstrate to the Consultants that the fire and life safety systems are functionally integrated and perform as required by the applicable By-laws, codes and standards. The *CP* will prepare a detailed report of the results of the Consultant Demonstration. Any deficiencies identified in the Consultant Demonstration of the fire and life safety systems shall be corrected and retested prior to the *AHJ* Demonstration. Upon satisfactory completion of the Consultant Demonstration, the *CP* will request the *AHJ* Demonstration.

### **8.2.3 AHJ Demonstration**

The *CP* should submit an occupancy permit application to the *AHJ* at least three weeks prior to the *AHJ* Demonstration. The *CP* shall contact the *AHJ* one week prior to the scheduled date for the *AHJ* Demonstration.

The *CP*, in conjunction with the *CRP*, shall coordinate and conduct the *AHJ* Demonstration of the functional testing of the fire and life safety systems based on the test protocol that was previously submitted to the *AHJ*. The *Building* Official may request an additional test of any part of the fire and life safety systems to demonstrate the operation of such systems. The *CP* will prepare a detailed report of the results of the *AHJ* Demonstration.

Any deficiencies identified in the *AHJ* Demonstration of the fire and life safety systems shall be corrected and retested in the presence of the appropriate *RPs*. Once all deficiencies have been corrected, the *CP* will coordinate a subsequent demonstration to the appropriate *AHJ* Officials.

### **8.2.4 Consultant Final Field Reviews**

Irrespective of the timing of the *AHJ* Demonstration, when a Project is nearing completion, the *CP* will conduct a site review and the *RPRs* will conduct field reviews of the building components that are within their scope of responsibility. Each *RPR* will prepare a deficiency list (both *building* code and non-*building* code requirements) for the components within their particular discipline and submit to the *CP* and *CRP* for their records. The *CP* will prepare a deficiency list that focuses on the fire and life safety components that must be corrected.

Once all of the deficiencies have been corrected to substantially comply in all material respects with the *building* code and other applicable enactments respecting safety (not including construction safety aspects), the *CP* will collect all of the occupancy permit submission documents from the *CRP* and schedule an *AHJ* Final Review.

Under special circumstances, minor *building* envelope deficiencies can be outstanding provided that the *owner* provides sufficient security to complete the deficiencies.

There may be other deficiencies, such as landscaping and off-street parking, which can be completed within specified time frames as detailed on the issued Development Permit.

### 8.2.5 AHJ Final Occupancy Reviews

The *CP* will conduct an *AHJ* Final Occupancy Review with the *Building* Official to review the completion of *building* code requirements in relation to the accepted *building* permit documentation.

The *CP* will review the documentation with the *Building* Official with respect to the remedy of any deficiencies that were identified during the *AHJ* Demonstration.

The *CP* will prepare a report of such *AHJ* Final Occupancy Review, including a list of outstanding *building* code related deficiencies, if any.

The trade contractors, being the trade permit holders, must arrange for a final review with the appropriate *AHJ* Trade Inspectors or Provincial safety authority and obtain the final clearance forms (sign-off cards) from *AHJ* and Provincial safety authorities for electrical, plumbing, sprinkler and standpipe systems, gas, elevators, etc.

The *CP* will confirm with the *AHJ*'s staff that all relevant *AHJ* Departments and Government agencies (e.g., Ministry of Environment, Ministry of Highways, BC Safety Authority, Health Authority, etc.) have provided their final clearance, as appropriate.

## 8.3 Occupancy Submission Documentation

Refer to the sample checklist of Occupancy Permit submission documents included as Attachment 2, "Occupancy Permit Submission Checklist" for the appropriate application of *RPR*'s professional seal and *CP*'s stamp.

Note that the timing of the submission of documents to the *AHJ* varies according to the occupancy permit submission list. The purpose of submitting certain documents early is to allow the *AHJ* Departments to complete their review. Timely submission of documents is critical in order to achieve the anticipated occupancy date.

Also note that occupancy permit submission list identifies certain documents that are not necessary to submit to the *AHJ* but can be submitted at the discretion of the *RPR* or *CP* (e.g., Schedules S-B and S-C from trade contractors' *SRPs*).

## 8.4 Occupancy Permit with Work Required (Provisional Occupancy)

The *AHJ* may issue an Occupancy Permit with work required (Provisional Occupancy) when the status of the project is sufficiently complete that it is safe to occupy with minor *building* code work still required.

The *AHJ* relies on the *CP* to coordinate with the *owner* the completion of all outstanding work within a reasonable period. The *AHJ* may require a letter of undertaking from the *owner*, with additional security as deemed appropriate. When all outstanding work is complete, the *CP* may request a reissued occupancy permit deleting any reference to outstanding work.

## 8.5 Final Design Drawings (formerly called Record Drawings)

In some Participating Local Governments that utilize the Certified Professional Program, Final Design Drawings are not required to be submitted to the *AHJ* for projects that are designed to the BC *Building Code*. The CP should confirm with the AHJ as to whether or not Final Design Drawings are required to be submitted.

For those Participating Local Governments that do required final design drawings, the following description outlines the requirements for final design drawings.

Final Design Drawings are drawings that are based on “issued for *construction*” drawings that have been updated to incorporate major design changes during *construction*. Final Design Drawings are NOT “as-built” drawings. The final design drawings are intended to incorporate addenda, change orders and other significant design changes, but not necessarily site instructions used to make minor adjustments to designed conditions. The final design drawings must be sealed by the RPRs.

If required by the AHJ, the CP needs to submit Final Design Drawings and supporting documents consisting of materials referenced in the “Certified Professional Program - Occupancy Permit Submission Documents Checklist” [refer to Attachment 12]. Final Design Drawings must be clearly marked as “Final Design Drawings”.

If there are no changes to the *building permit* drawings then the Final Design Drawings are not required. In this case the CRP must submit a letter to the City through the CP confirming that there have been no substantial changes from the issued *building permit* and trade *permit* drawings.

The final design drawings must be substantially consistent with the approved DE plans and incorporate any Minor Amendments that have been accepted by the City. These drawings may be audited for compliance with the issued DE plans. Inconsistency will delay the *occupancy permit* process.

The CRP must submit a letter to the CP prior to *occupancy permit* confirming that the Final Design Drawings and the *project* as constructed “substantially comply with the approved Development *Permit* plans incorporating any approved Minor Amendments”.

## 8.6 Occupancy Permits for Partially Completed *Buildings*

An *owner* may require an occupancy permit for partially completed *buildings* which can take on several different variations as described below. Refer to the “Guide to the Letters of Assurance for the BC *Building Code*” (<http://www.bccodes.ca/2006GuideLoA.pdf>) for further details.

### **8.6.1 Partial Occupancy with Minor Areas Excluded**

Where the base *building* shell is complete, but there are individual suites or small portions of the *building* that are incomplete (e.g., individual suites, amenity rooms, etc.), the *CP* will inform the *Building* Official and Occupancy Staff as to the extent of the occupancy exclusions.

The *CP* will discuss with the *Building* Official specific measures that are required to maintain safety for the occupants and the public.

Schedules *CP-2*, *C-A* and *C-B* may be used for minor partial occupancy permits provided they clearly state on such Schedules the extent of the area(s) within the *building* to be excluded from the occupancy permit.

### **8.6.2 Partial Occupancy with Major Areas Excluded**

Where the base *building* is not totally complete (a shell occupancy permit has not been granted), or with complex projects that have major areas which have not been completed, the *CP* will coordinate a project-specific occupancy protocol for partially completed *buildings* (including a construction safety plan) to maintain an adequate level of safety for occupants and the public in a partial occupancy. The *CP* must submit such protocol to the *AHJ* for review and acceptance.

Schedules *CP-2*, *C-A* and *C-B* may be used for partial Occupancy Permits provided they clearly state on such Schedules the extent of the area to be occupied.

### **8.6.3 Occupancy of One Building in a Project with Multiple building Components**

For some large *building* projects with multiple *building* components (e.g., multiple *buildings* above a common underground parking garage, etc.) the construction phasing may allow the occupancy of one *building* component prior to the completion of the other *building* components. The *CP* should discuss with the *owner* if they intend to occupy *buildings* sequentially. The *CP* will request that the *AHJ* issue separate *building* permits for each component to match the proposed sequential occupancies. The *CP* will coordinate a project-specific occupancy protocol for partially completed *buildings* (including a construction safety plan) to maintain an adequate level of safety for occupants and the public in a partial occupancy. The *CP* must submit such protocol to the *AHJ* for review and acceptance.

#### **8.6.4 Occupancy of Base Building Shell**

In some cases, the base *building* shell occupancy permit is issued by the *AHJ* upon completion and acceptance of the shell only (e.g., multi-tenant office *building* with no pre-leasing, shopping centre with no pre-leasing, etc.). All fire and life safety systems for the base *building* shell must be complete prior to issuance of the base *building* shell occupancy permit.

The unfinished tenant spaces will require separate *building* permits (tenant improvement permits) and subsequent occupancy permits.

*Building* permits for tenant improvement work are described in detail in Section 2.5.

#### **8.6.5 Principles and Procedures for Partially Completed Buildings**

The following principles are provided to assist *CPs*, *CRPs* and *RPRs* in determining the appropriate procedures when seeking occupancies for partially completed *buildings*:

- *CP* will prepare an occupancy protocol document dealing with the safety measures required to accommodate the occupants in a *building* that has portion(s) under construction;
- *CP* will review the occupancy protocol document with the *AHJ* prior to the *AHJ* Demonstration;
- The area(s) to be occupied must be substantially complete;
- Access routes to the occupied area(s) must be substantially complete and must be maintained clear and accessible at all times;
- Egress routes from the occupied area(s) to an acceptable open space must be substantially complete and must be maintained clear and accessible at all times;
- Fire and life safety systems within the occupied area(s) and within all floor levels below the occupied floor(s) must be substantially complete. Fire and life safety systems are required to be commissioned;
- The *CP* must meet with the *Building* Official on site to confirm that the occupancy protocol document incorporates appropriate site specific safety measures for public protection;
- Provide overhead protection if access to or egress from the occupied area(s) is beneath or adjacent to overhead construction activities;
- Provide hoarding or similar physical protection to separate and secure the occupied area(s), including access and egress routes, from the construction zone(s);
- Provide "Construction Zone - Do Not Enter" signage to separate the occupied area(s) from the construction zone(s).

The contractor will submit a site specific Fire Safety Plan for the occupied portion(s) of the partially completed *building* to the Fire Department to reflect the special requirements to accommodate the occupied zone(s).

## 9.0 Responsibilities of the *CP* after *Building* Occupancy

### 9.1 Introduction

This Section outlines the responsibilities of the *CP* after the occupancy permit has been issued.

### 9.2 Refund of Permit Fees

Some Participating Local Governments may refund a portion of the permit fees where the quality of services provided by the *CP* substantially reduces the involvement of *AHJ* Staff.

The *CP* will apply to the *AHJ* on behalf of the *owner* if *CP* refunds are applicable.

*CP* refunds or other letters of credit refund will not be released until all outstanding items are completed, including landscaping.

### 9.3 Complaints Post Occupancy

Post occupancy, code compliance issues may arise that generate complaints which are subsequently brought forward to the *AHJ*. In these instances, the *AHJ* may request information from the *CP* to determine what occurred on the site during construction. The *AHJ* will manage the resolution of the complaint.

## 10.0 Further Resources

This practice and procedure manual for the *CP* program has provided a detailed description of the role and responsibility of the *Certified Professional* on *building* construction projects in the Participating Local Governments in the Province of BC. In order to successfully practice as a *CP*, it is essential that knowledge be maintained and upgraded on an ongoing basis. To aid in the day to day practice of *CPs*, the following is a summary of resources available to provide support and information.

1. City of Surrey Website (<http://www.surrey.ca>) - available resources include:
  - a. *Certified Professional* Program - Municipal Insert
  - b. *CP* By-law
  - c. *Building* permit application forms and other documentation
  - d. Short and Long *Building* Code checklists
  - e. Contact information for the *CP* Advisory Committee
  
2. Province of BC *Building* Safety and Standards Branch (<http://www.housing.gov.bc.ca/building>) - available resources include:
  - a. Purchases information for the BC *Building* Code, and other relevant supporting documents
  - b. BC *Building* Code Appeal decisions
  - c. Links to National *building* By-law information and resources
  
3. National Code Documents (<http://www.nationalcodes.ca>)
  
4. Society of Fire Protection Engineers (<http://www.sfpe.org>)
  
5. National Fire Protection Association (<http://www.nfpa.org>)

For any questions related to the *CP* Program, not answerable through the above resources, please contact AIBC or APEGBC.

## List of Attachments

Attachment 1 - *Certified Professional Program*: Occupancy Procedures for *CP* Projects

Attachment 2 - *Certified Professional Program*: Occupancy Permit Submission Document Checklist



# Attachment 1

*Certified Professional* Program

Occupancy Procedures for *CP* Projects

**The Occupancy Procedure for CP Projects generally includes the following steps:**

- 1) The CP will work in close association with the CRP and RPRs in order to establish the project specific criteria for occupancy, including the list of submission documents and the test protocol.
- 2) The CP will make an application for occupancy permit to the AHJ at least 3 weeks in advance of the desired date of occupancy.
- 3) The trade contractors will submit to the CP the fire alarm verification certificate (including ULC Appendix C), the material and test certificates, the emergency generator test, the ULC protective signalling service certificate, the elevating devices inspection report, and the fire pump start up and flow test data sheet.
- 4) CP will coordinate the Consultant Demonstration of the fire and life safety systems (e.g. fire alarm, sprinklers, standpipes, EM generator, exit lighting, EM lighting, HVAC, etc.)
- 5) CP, CRP and RPRs will witness functional testing of the fire and life safety systems as part of the Consultant Demonstration and prepare a deficiency report of such tests.
- 6) One week prior to the desired AHJ Demonstration date, the CP will coordinate with the AHJ the date and time of the AHJ Demonstration.
- 7) Trade contractors will correct all of the deficiencies and witness the re-testing of fire and life safety systems as required.
- 8) RPRs will review correction of the deficiencies and witness the re-testing of fire and life safety systems as required.
- 9) The CP will submit to the AHJ a project specific test protocol and supporting documents at least 24 hours in advance of the AHJ Demonstration.
- 10) Trade contractors will submit their occupancy permit submission documents to the CRP and the documents are forwarded to the CP (See Attachment 2 for Occupancy Permit Submission Documents Checklist).
- 11) The CP will review the submitted documents with the CRP and RPRs for completeness and accuracy.
- 12) CP will coordinate and conduct the AHJ Demonstration of the fire and life safety systems.
- 13) CP, CRP and RPRs will create a deficiency list resulting from the AHJ Demonstration.
- 14) Trade contractors will correct the items on this deficiency list.
- 15) CP will coordinate with the general contractor, trade contractors, CRP, the RPRs and the appropriate Building Officials to demonstrate retesting of the deficiencies (this is not necessarily a Coordinated AHJ Demonstration).

- 16) The trade contractors, being the trade permit holders, must arrange for a final review with the appropriate *AHJ* Trade Inspectors or Provincial safety authority and obtain the final clearance forms (sign-off cards) from *AHJ* and Provincial safety authorities for electrical, plumbing, sprinkler and standpipe systems, gas, elevators, etc. (This may happen before or after submission of the schedule C-Bs from the *RPRs*.)
- 17) *CP* will coordinate with the *CRP* the Consultant Final *field reviews* of all of the other fire and life safety components (e.g. guards, handrails, exit routes, etc.) and non-life safety components (e.g., *building* envelope, interior finishing, etc.) of the project.
- 18) *CP* & *RPRs* create final deficiency lists of all components resulting from the Consultant Final *field reviews*.
- 19) Trade contractors correct the items on these final deficiency lists.
- 20) The *CP* obtains confirmation from the *RPRs* that the deficiencies have been satisfactorily corrected.
- 21) When all deficiencies are satisfactorily corrected, the *RPRs* submit their schedules C-B to the *CRP*, and the *CRP* submits their Schedule C-A and the collected C-Bs to the *CP*.
- 22) *CP* collects the schedule C-A and schedules C-B and submits the complete package (see Attachment 2) to the *Building* Official no less than one day in advance of the *AHJ* final review.
- 23) *CP* meets onsite with the *Building* Official for a final review to confirm that the project is substantially complete and is considered safe to occupy.
- 24) *CP* prepares a deficiency list, if required, resulting from the *AHJ* final review.
- 25) *CP* monitors correction of the deficiencies and reviews such correction with the *Building* Official.
- 26) The *CP* will review with the *AHJ* Occupancy Staff the status of clearance from other *AHJ* Departments (Law, Engineering, Environmental, Waterworks, Health, Fire, etc.) and assist to obtain clearances if required.
- 27) The *AHJ* will issue an Occupancy Permit when all clearances have been obtained.

# Attachment 2

## *Certified Professional Program*

### Occupancy Permit Submission Documents Checklist

<b>Occupancy Permit Submission Documents Checklist</b>	Date	
(Sample for typical complex building)	Page 1	

<b>Project Name</b>	
<b>Project Address</b>	
<b>Building Permit Number</b>	

- Legend:**
- AHJ = Authority Having Jurisdiction
  - BI = Building Inspector
  - CP = Certified Professional
  - CRP = Coordinating Registered Professional
  - FD = Fire Department
  - SRP = Supporting Registered Professional
  - RPR = Registered Professional of Record

Document	Action by	Submit Prior to AHJ Demonstration	Submit Prior to AHJ Final	Mandatory Submissions to AHJ	Submissions to RP/CRP/CP Optional to AHJ
<b>1. Occupancy Permit Application</b>					
Occupancy Permit Application	CP	3 weeks		to AHJ	
Test Protocol	CP	24 hours		to BI	
Fire Safety Plan	Owner	2 weeks		to FD	
<b>2. Schedule S-B Letters of Assurance - SRPs - For Design during Construction (one original signed and sealed)</b>					
Upper windows	Trade contractor's SRP				to RPR/CRP/CP
Storefront windows	Trade contractor's SRP				to RPR/CRP/CP
Wall cladding	Trade contractor's SRP				to RPR/CRP/CP
Metal roof panels	Trade contractor's SRP				to RPR/CRP/CP
Misc. Metals and Structural Steel	Trade contractor's SRP				to RPR/CRP/CP
Exterior & interior steel studs & soffits	Trade contractor's SRP				to RPR/CRP/CP
Window washing anchors	Trade contractor's SRP				to RPR/CRP/CP
Mechanical seismic	Trade contractor's SRP				to RPR/CRP/CP
Plumbing seismic	Trade contractor's SRP				to RPR/CRP/CP
Electrical seismic	Trade contractor's SRP				to RPR/CRP/CP
Guards & handrails	Trade contractor's SRP				to RPR/CRP/CP
Brick ties	Trade contractor's SRP				to RPR/CRP/CP
Pool design	Trade contractor's SRP				to RPR/CRP/CP
<b>3. Letters of Assurance - Field Review - RPRs</b>					
Schedule CP-2	CP		24 hours	to BI	
Schedule C-A	CRP		24 hours	to BI	
Schedules C-B					
Architectural	Architect		24 hours	to BI	
Structural	Structural engineer		24 hours	to BI	
Mechanical	Mechanical engineer		24 hours	to BI	
Plumbing	Plumbing engineer		24 hours	to BI	
Fire suppression	Fire suppression engineer		24 hours	to BI	
Electrical	Electrical engineer		24 hours	to BI	
Geotechnical (2 originals)	Geotechnical engineer		24 hours	to BI	
<b>4. Letters of Assurance - Field Review - SRPs</b>					
Schedule S-C					
Upper windows	Trade contractor's SRP				to RPR/CRP/CP
Storefront windows	Trade contractor's SRP				to RPR/CRP/CP
Wall cladding	Trade contractor's SRP				to RPR/CRP/CP
Metal roof panels	Trade contractor's SRP				to RPR/CRP/CP
Misc. Metals and Structural Steel	Trade contractor's SRP				to RPR/CRP/CP
Window washing anchors	Trade contractor's SRP				to RPR/CRP/CP
Mechanical seismic	Trade contractor's SRP				to RPR/CRP/CP
Plumbing seismic	Trade contractor's SRP				to RPR/CRP/CP
Electrical seismic	Trade contractor's SRP				to RPR/CRP/CP
Guards & handrails	Trade contractor's SRP				to RPR/CRP/CP
Brick ties	Trade contractor's SRP				to RPR/CRP/CP
Pool construction	Trade contractor's SRP				to RPR/CRP/CP

Document	Action by	Submit Prior to AHJ Demonstration	Submit Prior to AHJ Final	Mandatory Submissions to AHJ	Submissions to RP/CRP/CP Optional to AHJ
<b>5. Fire Suppression, Plumbing and Mechanical</b>					
Sprinkler material test certificates					
underground piping	Trade contractor	24 hours		to BI	
above ground piping	Trade contractor	24 hours		to BI	
Standpipe material test certificate - above ground	Trade contractor	24 hours		to BI	
Fire pump start up & flow test data sheet	Trade contractor	24 hours		to BI	
Backflow preventer test report	Trade contractor	24 hours		to BI	
Chlorination certificate	Trade contractor	24 hours		to BI	
Heat Trace Confirmation Letter	Trade contractor	24 hours		to BI	
Parkade CO detectors calibration certificate	Trade contractor				to RPR/CRP/CP
HVAC balancing report (Life Safety Fans)	Trade contractor				to RPR/CRP/CP
<b>6. Fire Alarm &amp; Electrical</b>					
Fire alarm certificate of verification	Trade contractor	24 hours		to BI	
Appendix C of CAN/ULC-S537	Trade contractor	24 hours		to BI	
Emergency Generator Verification report	Trade contractor	24 hours		to BI	
ULC Certificate "Central Station Fire Protective Signalling Service" with site specific certificate number	Trade contractor	24 hours		to BI	
<b>7. Energy Utilization Conformance Documents</b>					
Transmittal to AHJ	CP		1 week	to AHJ	
Building envelope (insulation, vapor barrier)	Architect		1 week	to AHJ	
Mechanical equipment	Mechanical engineer		1 week	to AHJ	
Lighting	Electrical engineer		1 week	to AHJ	
<b>8. Alternative Solutions</b>					
Cover letter with list of Alternative Solutions	CP		24 hours	to BI	
Letter of conformance with Alternative Solutions	Alternative Solutions author		24 hours	to BI	
<b>9. Survey Certificate</b>					
Non-encroachment building survey	General contractor		24 hours	to BI	
Site survey confirming height of building	General contractor		24 hours	to BI	
<b>10. Inspection clearances</b>					
Electrical Inspector's clearance	Trade contractor				to RPR/CRP/CP
Plumbing Inspector's clearance	Trade contractor				to RPR/CRP/CP
Sprinkler inspector's clearance	Trade contractor				to RPR/CRP/CP
Provincial Gas Inspector clearance	Trade contractor		24 hours	to BI	
Fire Department clearance	CP				to RPR/CRP/CP
Elevator Inspector's clearance	Trade contractor	24 hours		to BI	
Health Inspector clearance	Trade contractor				to RPR/CRP/CP
Ministry of Environment - soil remediation	Trade contractor		24 hours	to BI	

