

Builder Bulletin

19
Revised

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CONDOMINIUM PROJECTS: DESIGN AND FIELD REVIEW REPORTING

This Bulletin replaces Builder Bulletin 19R (Revised), issued May 1, 2001.

WHAT THIS BULLETIN IS ABOUT

This bulletin and its related documents replace Builder Bulletin 19R (Revised) that was in effect from March 1, 1995 until June 30, 2001.

This bulletin sets out the requirements for reports and information that must be provided to the Tarion Warranty Corporation ("Tarion") by Field Review Consultants and the vendor/builders of 'Designated Condominiums' enrolled under the *Ontario New Home Warranties Plan Act*. Designated condominiums are those condominiums described in the table on page 2 of this introduction as Types C and D.

Provision of information, certificates and reports relating to the design and field review phases of a condominium project are conditions of continued registration of the vendor/builder.

This bulletin contains a number of changes and additions to the previous Builder Bulletin 19R that was effective until June 30, 2010. The changes seek to bring more clarity and greater consistency to the nature and scope of reports supplied to Tarion by Field Review Consultants (FRCs) acting on behalf of vendor/builders.

In anticipation of new Ontario Building Code changes regarding six storey wood frame construction (effective January 1st, 2015), Tarion has updated this bulletin to reflect new requirements for this type of construction. As of January 1st, 2015, builders who plan to construct this type of building will be required to fulfill additional requirements as outlined in the Scope of Work Proposal for Mid-Rise Wood Frame Construction as outlined beginning on [page 29](#).

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HERE'S WHAT'S CHANGED

Steps have been taken to provide more structure to the FRC reporting requirements by establishing consistent reporting formats and by employing objective quality assessment standards.

FRC Builder Bulletin 19R Qualification Status (BQS)

From the date of this bulletin consultants wishing to undertake field review work for vendor/builders engaged in the construction of designated condominiums need to be qualified within the terms of Bulletin 19R (see Module 1). When a vendor/builder uses an FRC that does not hold BQS, Tarion will take that factor into consideration when assessing the release of security.

FRC's engaged in providing Bulletin 19R services shall not undertake the task of preparing a performance audit for the same project.

Scope of Work

A 'Scope of Work' submission will replace the former field review contract. It details the level of effort and areas of review Field Review Consultants commit to. (The Scope of Work is explained in Module 2.)

Reporting Requirements

The requirement for the submission of monthly reports to Tarion has been removed. The main reporting requirement now falls within the Milestone Reports. (Milestone Reports are explained in Module 4.)

Milestone Reports will be supplemented by briefer reports giving outline information. They will be submitted every 60 days. (60 Day Reports are explained in Module 4.) The requirement for a Design Review and the submission of a Bulletin 19R Final Report remains. There shall be individual reporting for multiple towers under one enrolment. All field tests must be carried out by a qualified consultant within their discipline.

GENERAL

The provisions of Builder Bulletin 19R apply equally to both vendors and builders of condominiums described as Type C and Type D in the following table. Such condominiums are required, under the Ontario Building Code (OBC), to be designed by an architect and professional engineer. The Registrar reserves the right to designate any condominium project as being subject to the provisions of this bulletin.

Description of Condominium Type

The chart set below is an extract from Builder Bulletin 28 (Revised 2001) - 'Tarion Requirements for Receipt and Release of Security'.

Category	Description
Condo: Type A	Project has only Part 9 OBC construction requirements and is a lot-line condominium.
Condo: Type B	Project has only Part 9 OBC construction requirements and is NOT a lot-line condominium
Condo: Type C	Project has both; Part 9 and Part 3 OBC construction requirements.
Condo: Type D	Project has only Part 3 OBC construction requirements.

Voluntary submissions for Type A and Type B condominiums

Tarion is prepared to receive and process applications from vendor/builders of Type A and Type B condominiums that wish to voluntarily follow the provisions of Builder Bulletin 19R. For further information on this matter contact the Manager of Tarion's Condominium Group.

Voluntary submissions for Type C and Type D condominiums

Tarion recommends that the vendor/builder and/or FRC submit a copy of the construction schedule and its updates (as available) with each Milestone Report, providing Tarion with an overview of the duration of construction and required reporting documents.

Definitions

In this bulletin and any related modules or other documents the following terms shall have the meanings set out below.

“Tarion” means Tarion Warranty Corporation.

“FRC” means the Field Review Consultant designated by the vendor/builder for the applicable condominium project.

“BQS” means the certification given to an FRC who qualifies under the terms of this bulletin and in particular Modules 1 and 1a.

“Prime Consultant” means one or more duly qualified architects and/or engineers designated by the vendor/builder to provide the advice, authorizations, declarations and certificates permitted or required by this Builder Bulletin 19R.

The term "vendor/builder" applies to vendors, builders, and those persons who are both. The terms "vendor" and "builder" are both defined in the *Ontario New Home Warranties Plan Act*.

Notices, submissions

Any notices or other communications with Tarion's Condominium Group shall be addressed to: Tarion Warranty Corporation 5160 Yonge Street, 12th Floor, Toronto, Ontario M2N 6L9, Attention: Condominium Group.

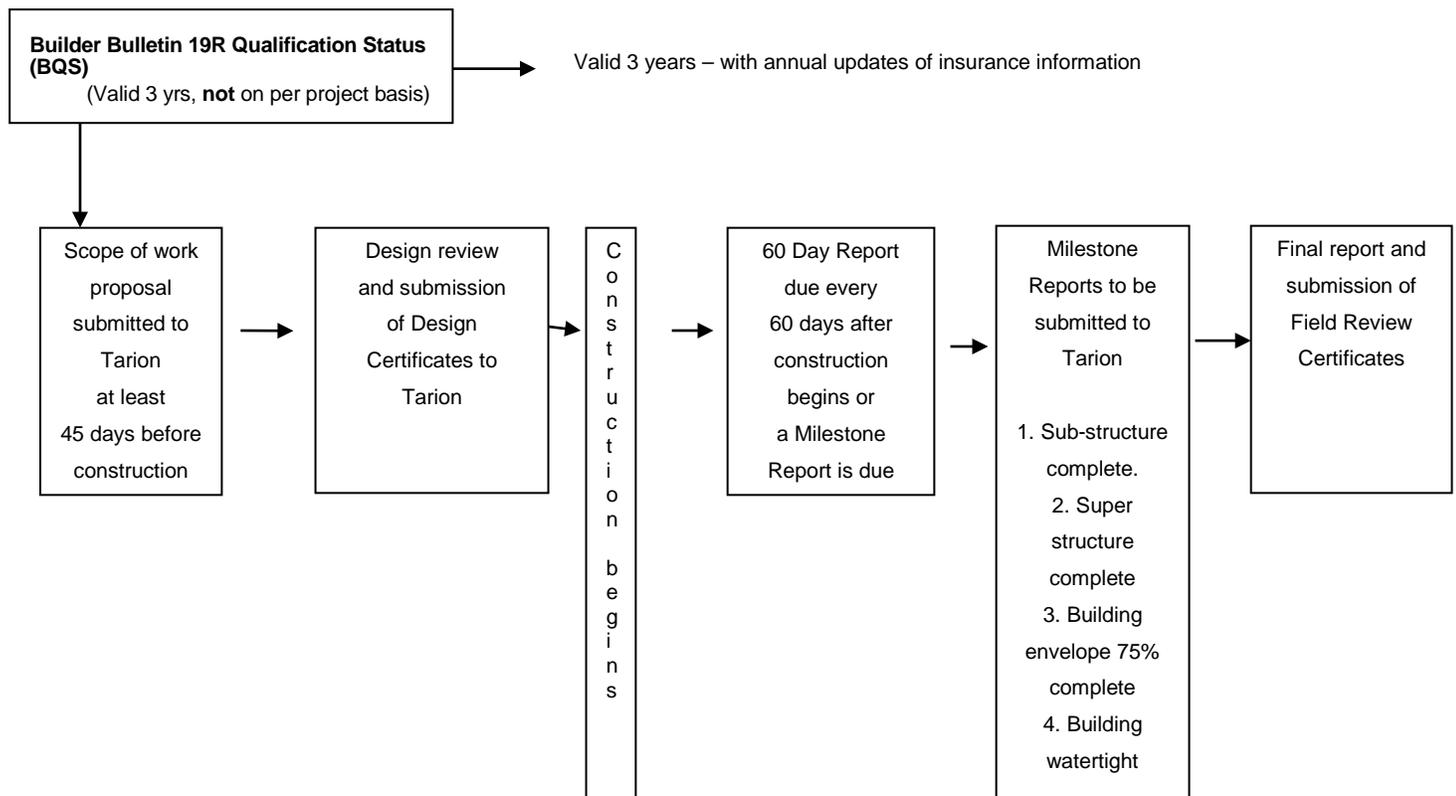
Submit

Means to deliver Statutory Warranty Forms and other documents in accordance with the Regulations. Acceptable methods of delivery are by hand, courier, facsimile transmission or except during a general interruption of postal service, regular mail or registered mail. In the case of regular mail, delivery is effective on the postmark date as long as Tarion receives it within 10 days of the expiry of the applicable period. Registered mail is effective on the postmark date. Facsimile transmission is effective on the date sent whether or not it is a business day. Delivery by hand or courier is effective on the date Tarion receives it if it is a business day and otherwise on the next business day.

PROOF OF SUBMISSION AND DELIVERY

If there is a dispute concerning delivery, the onus is on the builder to establish when delivery occurred. To avoid confusion, builders are encouraged to use methods of delivery (such as registered mail or courier) which will ensure that the builder will have proof of delivery.

THE BUILDER BULLETIN 19R PROCESS



It is assumed that FRCs observing the terms of this bulletin have attained BQS. (BQS is explained in Module 1.) The following documents must be completed and submitted to Tarion throughout the design and construction phases of the condominium:

Scope of Work Proposal

As the first stage of the Bulletin 19R process the Scope of Work Proposal outlines the level of effort and number of visits an FRC commits to as part of monitoring identified risk areas. It must be submitted at least 45 days in advance of the start of construction and is subject to review and approval by Tarion. Tarion will respond to submitted Scope of Work proposals within 30 days of receipt. (The Scope of Work proposal is explained in Module 2.)

Risk areas and factors within the Scope of Work were identified following examination of Tarion's complaints, claims, dispute resolution history and practical experience within the industry and the contributions of representatives of the FRC community.

-
1. Tarion will review and respond to proposal within 30 days.
 2. Design certificates may be submitted on a phased basis - see Module 4a.
 3. No 60 Day Report will be required where a Milestone Report is completed within that 60 day period.
-

Design Review and Certificates

Design Certificates confirm that the design complies with the Ontario Building Code and good architectural and engineering practice. Individual certificates must be completed by each of the various design professionals who produce the construction documents as they relate to the identified risk areas laid out in the Scope of Work. The vendor/builder must submit each certificate to Tarion at least 30 days prior to the commencement of the work covered by that portion of the design. (A sample Design Certificate can be found in Module 4a.)

60 Day Reports

The 60 Day Reports provide a tracking mechanism designed to assist Tarion in assessing the progress of a project's construction without placing too large an administrative workload on the FRC. The reports are to be completed according to instructions found at the head of the report template. (A sample report template can be found in Module 4b.)

Milestone Reports

Comprehensive reports must be completed and submitted to Tarion as soon as possible and, in any event, within 30 days of specified stages (milestones) of construction being completed. The reports will contain information on all outstanding deficiencies in existence at that point in time. An initial Milestone Report will be in two parts. The first part is a form giving deficiency tracking information and a summary of the issues. The second part, appended to the first, will be a narrative section giving general information about the construction as it relates to the element of the project in question. It will give full details of any deficiencies relating to it and list recommendations by the Prime Consultant for their correction. The definition of 'deficiency' as it relates to Builder Bulletin 19R is appended to Module 4.) Subsequent Milestone Reports will have an additional tracking sheet that provides information on progress made to rectify previously identified deficiencies. The Milestone Report shall identify all major design change orders that have been made during the reporting period affecting focus areas. The FRC shall keep on file copies of the design change orders for future use. The Milestone Report shall identify the design details which have been changed and whether or not the appropriate Prime Consultant has authorized those changes. Tarion will review each Milestone Report and report back to the FRC and vendor/builder within 30 days if further information is required.

Milestone Reports form the basis for establishing consistency in FRC reporting. The quality and content of reports will be scrutinized by Tarion and FRCs will be advised if shortfalls in reporting standards are identified. (For a fuller explanation of an FRC's responsibilities regarding the quality of reports, please refer to the sections entitled 'FRC Bulletin 19R Qualification Status' and 'Application for Bulletin 19R Qualification Status' in Module 1.)

All work required to correct deficiencies noted in any of the reports will be the responsibility of the vendor/builder and may influence the amount of security released following submission of the Bulletin 19R Final Report. Satisfactory repairs must be confirmed as complete by the FRC and referenced in the next Milestone Report(s) that falls due.

The Final Report

The Final Report consists of a bound copy of the following documents:

- All Milestone Reports associated with the project
- The Condominium Declaration as filed with the Land Titles Office
- All Design Certificates
- Field Review Declaration
- As built project drawings, specification, equipment operating manuals, and extended warranty certificates for any building components, if any.

(As built drawings, specifications, equipment operating manuals, and extended warranty certificates as above are to be submitted directly to the elected board not Tarion.)

It will also include the following documents as applicable:

- Design Architect's final clearance
- Site Work Engineer's final clearance
- Structural Engineer's final clearance
- Mechanical Engineer's final clearance
- Electrical Engineer's final clearance
- Acoustical Engineer's final clearance
- Occupancy permits - if available

The FRC submits this Final Report to the vendor/builder in the first instance and must notify Tarion as soon as this has occurred. The vendor/builder then submits this report to Tarion once construction of the condominium has been completed, the condominium declaration and description have been registered and all reports and information due to Tarion have been received.

The Field Review Declaration forms a part of the Final Report and among other things verifies that review of the identified risk areas contained in the Scope of Work as they relate to the construction project have been completed to the satisfaction of the FRC and the Prime Consultants. All Prime Consultants engaged in the review of the identified risk areas contained in the scope of work shall complete and sign off the Field Review Declaration, as well as providing all relevant documentation required under the *Condominium Act, 1998 (Ontario)* (A sample Final Field Review Declaration is appended to Module 4d.)

The declarant is required to deliver to the board of the Corporation the documents referred to in section 43(5) of the *Condominium Act (Ontario)* and in particular

- (i) proof, in the form, if any, prescribed by the Minister, that the units and common elements have been enrolled in the Plan within the meaning of the *Condominium Act, 1998 (Ontario)* in accordance with the regulations made under the *Condominium Act, 1998 (Ontario)*, and
- (ii) a copy of all final reports on inspections that the Corporation within the meaning of the *Condominium Act, 1998 (Ontario)* requires be carried out on the common elements;

The vendor/builder must deliver a copy of the Bulletin 19R Final Report to the owner-elected condominium board of directors at the turnover meeting and the report may be referred to at a later date if warranty problems arise.

Even if the final B19R report is not available in its entirety at the time of the turnover meeting, copies of all available documents shall be supplied to the elected board e.g., copies of all milestone reports, design certificates, and as built drawings.

All documents must be signed off to acknowledge and confirm that they have been received.

BUILDER BULLETIN 19R AND THE RELEASE OF SECURITY

All information, reports, and certificates must be submitted to Tarion within the time periods specified. The release of security is conditional upon Tarion receiving the documentation as specified in this bulletin and in Builder Bulletin 28 (which deals with such matters as unsold units and evidence of transfer of title for sold units, etc.) and is further conditional upon Tarion accepting that the contents of those documents accurately reflect the actual conditions on site.

Tarion will review the Bulletin 19R Final Report within 30 days of receipt and notify the vendor/builder of any further technical requirements or adjustments to the required security depending on the extent of any outstanding deficiencies as well as any outstanding administrative or non-technical matters. If Tarion is satisfied there are no outstanding deficiencies, the release of security, subject to the requirements in Builder Bulletin 28, will be completed within 45 days of receipt of all the required documentation.

The FRC will assess the likely costs of rectifying outstanding matters based on current sub-trade prices for such rectification and provide them to Tarion. Tarion will then review the costs provided and retain an appropriate amount of the security. The amount retained will reflect the likely cost of rectification in the event that Tarion was required to give effect to any remediation and will also take into account any outstanding administrative and non-technical costs.

If Tarion does not receive the Bulletin 19R Final Report, it will continue to hold the vendor/builder's security for a maximum of seven years or until such time as Tarion is satisfied that the building is constructed in accordance with the vendor/builder's warranty obligations under Section 13, *Ontario New Home Warranties Plan Act*.

For full information regarding Tarion's requirements for the receipt and release of security, please refer to Builder Bulletin 28 (Revised, 2001).

Tarion reserves the right to use the vendor/builder's security to ensure that the requirements of this bulletin are met on a continuing basis. With appropriate notice Tarion may, at its sole discretion and dependent on the situation, either recognize the original Scope of Work submission or secure the services of another qualified FRC.

TARION UNDERTAKINGS

This bulletin places a number of time based performance requirements on FRCs. In return Tarion is committed to completing elements of its administrative functions within specified periods of time. Generally, these functions relate to the processing and review of applications and submitted reports.

WHERE TO FIND THE FORMS FOR BULLETIN 19R

Standardized reporting formats are crucial to consistent reporting. Tarion has developed templates for all required reports and a link to these can be found on our web site at:
<http://www.tarion.com>

signed
"Howard Bogach"
Registrar

Builder Bulletin 19R - Module 1 FRC Bulletin 19R Qualification Status

WHO NEEDS BULLETIN 19R QUALIFICATION STATUS?

The requirement for Bulletin 19R Qualification Status (BQS) will apply to consultancy firms providing field review services for projects subject to the provisions of Builder Bulletin 19R i.e. Type C or Type D¹ condominium projects.

A consulting firm will not be required to qualify on a per project basis. Once awarded, BQS will remain valid for a period of three years (renewable) subject to the provisions below. Appropriate levels of insurance coverage must be maintained throughout the period of qualification.

BQS will ensure Field Review Consultant firms (FRCs) working on Bulletin 19R condominium projects have the capacity to undertake such work and meet the requirements of Builder Bulletin 19R. To this end, firms will need to show they retain or have access to technically and professionally qualified personnel certified to practice in the Province of Ontario.

OBJECTIVE APPLICATION CRITERIA

The full criteria for achieving and retaining BQS are detailed on the application form following this introduction. For ease of reading, the main areas in which FRCs must show capacity and competence are summarized below:

- Employ or have access to the necessary professional resources to conduct Bulletin 19R work²
- Carry sufficient insurance coverage³
- Properly sign off on each Bulletin 19R report⁴
- Undertake to use only qualified agencies to conduct required testing unless qualified personnel and facilities are retained in-house

1. Table extracted from Builder Bulletin 28

Category	Description
Condo: Type A	Project has only Part 9 OBC construction requirements and is a lot-line condominium.
Condo: Type B	Project has only Part 9 OBC construction requirements and is NOT a lot-line condominium
Condo: Type C	Project has both; Part 9 and Part 3 OBC construction requirements.
Condo: Type D	Project has only Part 3 OBC construction requirements.

2. For Engineers this is a Certificate of Authorization issued by Professional Engineers of Ontario and for Architects, a current Certificate of Practice issued by Ontario Association of Architects. (FRCs may be required to produce evidence of an established relationship between them and any sub-consultant and that sub-consultant's availability to the FRC.)

3. The minimum level of liability cover should be consistent with the minimum limits laid out for the members of Professional Engineers of Ontario or Ontario Association of Architects as appropriate. Liability coverage should extend to sub-consultants. Alternatively, it will be acceptable to show that sub-consultants carry the same level of liability cover.

4. The individual consultant with overall responsibility for a project and who is in a position to legally bind the FRC firm must sign off on completed reports. Where day-to-day responsibility has been delegated to some other consultant this signature must be in addition to that of the delegated person's.

Where an FRC initially falls short of submitting the level of information required to achieve or maintain BQS, Tarion will work with the applicant to overcome any difficulties as soon as possible.

Supplying inadequate, false or misleading information may result in BQS being denied, suspended or cancelled. Where BQS is withdrawn from an FRC and that firm is then retained to provide FRC services on Type C or Type D construction, Tarion will examine each project on a case-by-case basis and the release of security may be affected. If de-qualification takes place during an ongoing project, Tarion will work with the vendor/builder to find the best solution to the shortfall in FRC construction review. Every possible effort will be made to ensure that the release of security will not be affected by such action.

It is acknowledged that circumstances within FRC firms alter over time. FRCs must notify Tarion of material changes to the information supplied in their current application for BQS.

The Prime Consultants for the project shall not perform Builder Bulletin 19R services or conduct a performance audit for the same project.

Tarion's Condominium Group will administer the application and renewal procedures for BQS. (The address of the Condominium Group is as shown on page 3 of the bulletin.

THE PROCESS

- Under the provisions of this bulletin the FRC shall comprehensively review various aspects of the construction project. Areas of responsibility include:
- Assessing site inspection reports (including primary design team reports) as they relate to identified risk areas.
- Verifying specialist inspection and testing reports are in order and appropriately comment on identified issues in those reports.⁵
- Providing documentation that confirms other consultants and agencies evaluating the quality of construction are appropriately certified in their area of expertise.⁶
- Conducting field reviews to monitor performance and quality of workmanship in identified risk areas.
- The FRC engaged in providing B19R services for a project shall not conduct the performance audit after registration for the same project.

5. Where concerns exist regarding the reports of others, the FRC will be expected to bring them to the attention of Tarion if the matter cannot be rectified in discussion with the report's authors. Also, any construction deficiencies noted in the reports generated by others must be brought to Tarion's attention.

6. For testing agencies it is suggested that they abide by certified or registered standards e.g. DIR.011-98, a list of CSA international certified concrete testing laboratories.

THE PROCESS OF APPLICATION

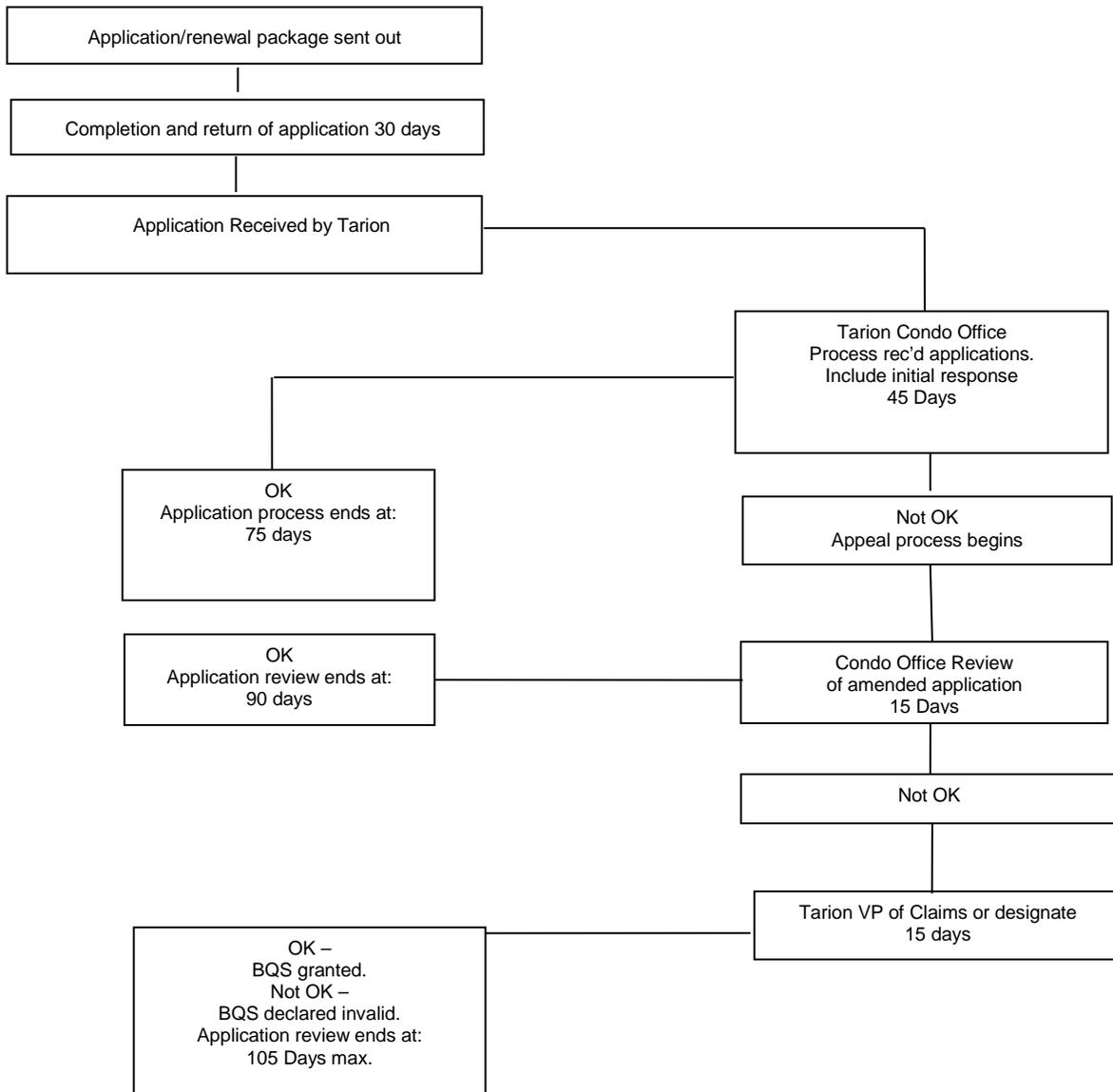
Once an application form has been completed and submitted, Tarion's Condominium Group will process it. Initial stages of the processing may result in contact with the applicant to elicit further information or clarification of ambiguities. Additionally, interviews may be set up between representatives of the Tarion's Condominium Group and the applicant to gather further information and to disseminate information about the nature of the Bulletin 19R provisions.

If, following attempts to overcome misunderstandings or shortfalls in supplied information, a decision goes against the FRC and BQS is denied, written notification giving the reasons for such decision will be provided. The decision may be challenged by giving written notice to Tarion's Condominium Group at the address set out on page 3 of this bulletin. Any challenge must contain written details of how identified difficulties will be addressed. An appeal/review process will then be set into motion.

The process gives FRCs every opportunity to discuss and rectify perceived shortcomings in meeting BQS criteria. The design of the process means that, whenever possible, the elements of the appeal/review process will be completed before a current BQS expires or is lost. In this way an FRC's ability to continue Bulletin 19R work is not compromised during the review process.

The process and timeline for first applications and renewals is set out in the following chart: (see next page)

FRC BULLETIN 19R QUALIFICATION PROCESS



6. Please tell us about the number of staff you have.

	Full time	Part time	Total
Professional			
Technical			
Administrative			
Other			

7. Please supply information about your insurance arrangements.

Name of Carrier: _____ Professional Liability Policy: YES NO

Policy Number(s): _____ Expiry Date: _____

PLEASE NOTE: The applicant must have professional liability coverage. Arrangements must be made for the insurance carrier to send the relevant information (e.g. the Policy Binder) to Tarion. **The applicant must make these arrangements.** The documentation must show:

- Name of carrier
- Type of policy
- Limit of liability (per occurrence and aggregate limits)
- Policy period

Please confirm you have made the above arrangements (check box):

SECTION TWO: PROJECT INFORMATION

8. How many projects is your firm involved with at the present time?

(Where projects consist of multiple units being constructed under one development name, this will be considered one project.)

No. of Residential: _____ No. of Mixed Use: _____

9. Please list current and/or past projects according to the variables below.

(Details of last 6 projects. Use additional paper if required.)

Project name	City/Province/State	Project Gross Floor Area (ft.)	Time and Duration of Involvement	Applicant's Role e.g. Architect. FRC, etc.	Project Type e.g. Low rise, commercial, B19 etc.

Note: If there are other projects that you feel would be relevant to Tarion’s consideration of this application that are not covered in the list above please enclose the information with this form.

10. We would like to know more about your experience as an FRC working on condominium projects.

(If you are new to this area of construction and as a result cannot provide the full information requested below please provide Tarion with five construction related, professional references. These should be attached on separate sheets.)

Number of condominium projects applicant has worked on the last five years: _____

11. How do you structure your project teams?

Use a separate sheet of paper to outline any established process your firm will use to structure Bulletin 19R project teams and how quality assurance/control mechanisms are used to mitigate the firm’s risk.

Project team information attached (check box):

12. List key personnel to be employed on the condominium project.

(Continue on a separate sheet if necessary.)

Name	Position/Title	Focus Area

(Please read and complete certification on next page.)

CERTIFICATION

I understand that this information does not guarantee the availability or award of Bulletin 19R contracts. Subject to my right to exercise all available review and/or appeal rights I hereby waive all claims resulting from any errors or omissions by Tarion through this process. I undertake to complete all of the work and services contemplated to be performed and to submit all reports, forms and other required information at the times and in the manner laid out in the current Builder Bulletin 19R and Scope of Work proposals submitted by this firm and approved by Tarion. I undertake to contract and employ only those consultants and other professionals in relation to Bulletin 19R work who are certified to practice in the Province of Ontario and are members in good standing with their respective certifying authorities. Through the exercise of due diligence I undertake to ascertain that testing agencies retained by this firm in relation to Bulletin 19R projects use testing standards established by CSA International or other appropriate professional bodies.

I will maintain all records of construction field review including correspondence with the vendor/builder, the Design Architect and all other consultants and authorized persons concerned with designated Type C and Type D condominium projects for a period of seven years following the registration of the condominium corporation. I will make these records available to Tarion at their request.

I will inform Tarion of material changes to information provided in this application that may affect the award or retention of FRC Bulletin 19R Qualification Status. Notification will be made within 30 days of becoming aware (or 30 days of the date when the undersigned ought to reasonably have become aware) of any such changes having taken place.

I certify that to the best of my knowledge the information contained in this application is complete and accurate. I have authority to bind the applicant.

AUTHORIZED OFFICER'S SIGNATURE

PRINT NAME

DATE

POSITION

TELEPHONE

EMAIL

(CERTIFICATION TO BE SIGNED IN THE PRESENCE OF WITNESS)

WITNESS' SIGNATURE

PRINT NAME

Builder Bulletin 19R - Module 2A

Scope of Work

THE ROLE OF THE FIELD REVIEW CONSULTANT

Field Review Consultants (FRCs) provide a layer of quality review that augments the process of ensuring that the spirit and intent of the construction documents are realized. Components of this work include the monitoring of identified risk areas for adequate component performance and checking that the quality of the finished project meets or exceeds current construction standards.

FRCs also collect and review the relevant sections of reports submitted to them and confirm that identified risk areas for which they are not directly responsible have been reviewed by Prime Consultants or other agencies. (For an explanation of reporting requirements please see Module 4.)

WHEN TO SUBMIT A SCOPE OF WORK PROPOSAL

A Scope of Work proposal is to be submitted to Tarion's Condominium Group for each designated condominium construction project. The submission must be received by Tarion no later than 45 days prior to the beginning of construction.

HOW TO COMPLETE A SCOPE OF WORK PROPOSAL

When completing a Scope of Work proposal the FRC should be mindful of the number of visits necessary to evaluate a representative sample of a building's components and its overall construction. Review sampling will need to be randomly selected and evenly distributed e.g. if the guidelines suggest a 30% level of review of traffic coating and there are three parkades in a building, it would not be appropriate to review only one of the three floors. Examination of a percentage of each floor would be expected.

In determining what level of review is necessary for an individual project, Tarion will be relying on the professionalism of the FRC firm. The FRC has to commit to a level of effort that allows them comfort in commenting on identified risk areas. Comfort levels may be derived from observation of statistically valid samples based on square footage, a percentage of components, a number of tests or some other industry standard.

A set of guidelines designed to assist the FRC and the vendor/builder to better understand the typical level of effort in percentage terms and the number of visits Tarion expects to be proposed in relation to various building types can be found in Modules 3a and 3b. The guidelines should be used to establish the proposed number of visits and extent of review. The guidelines feature notional buildings and suggest target review levels for them. It is unlikely that the notional buildings will accurately reflect real projects but they provide FRCs with baselines from which appropriate levels of review can be determined and proposed.

Once the FRC is satisfied as to the number of visits and level of review to propose, the information should be entered in the appropriate sections of the Scope of Work form. **The vendor/builder shall then submit the completed form to Tarion's Condominium Group at the address shown on page 3 of this bulletin.**

Note: Vendors/builders are strongly advised to work with an FRC before going out to tender for the submission of Scope of Work proposals. Knowing in advance what level of review Tarion will expect of an FRC retained by a vendor/builder in relation to a particular project will minimize the later possibility of the chosen proposal being refused.

TARION'S EXPECTATIONS AND COMMITMENTS

Each Scope of Work proposal must be received by Tarion no later than 45 days prior to the beginning of construction.

Where circumstances dictate that a change in the level of an FRC's effort in reviewing a project is necessary to properly monitor the performance of a building's components e.g. originally proposed concrete cladding is substituted with EIFS, Tarion must be notified of the changes at the earliest opportunity.

Once a Scope of Work proposal has been submitted the Tarion Head Office, Attention: Condominium Group will review it. A determination as to the adequacy of the level of review proposed shall be made and the outcome notified to the vendor/builder and FRC within 30 days of receipt. Should Tarion fail to notify the vendor/builder and FRC within this time the proposed Scope of Work will be deemed to have been accepted.

If a submitted Scope of Work falls short of Tarion's expectations the vendor/builder and FRC will be contacted. Given the time constraints that surround Scope of Work submissions, a telephone call or meeting will be set up at the earliest opportunity and every effort made to resolve any issues.

HOW THE SCOPE OF WORK FITS IN WITH THE REST OF BUILDER BULLETIN 19R

The Scope of Work precedes, and forms the framework for the FRC reports that keep Tarion informed about the progress of each condominium project. It lays out the target level of review to which the FRC commits, subject to necessary changes, in the early stages of the project. Tarion will use the Scope of Work as a point of reference when reviewing the subsequent 60 Day, Milestone and Final reports.

THE SCOPE OF WORK FORM EXPLAINED

(See Fig. 1 on next page)

The Scope of Work form provides guidance notes in relation to 'Documentation review' i.e. the collection and reviewing of reports created by other agencies or consultants, and 'Field review' i.e. those elements of review undertaken by the FRC or their agents.

Where an FRC provides a service 'in house' e.g. concrete testing, such activity should be dealt with as though it were provided by an outside agency or consultant and as such should be subject to 'documentation review'. The fact that a documentation review will take place with respect to particular risk areas should be noted in general terms on Scope of Work Proposals.

The guidance notes within the form do not require the FRC or other agencies to comment specifically on those elements of the identified risk areas. The notes are representative of previously identified, problematic issues. In undertaking submission of documentation and/or Field Reviews, FRCs are asked to be vigilant for evidence of problems in these areas.

Additional guidance notes precede some risk areas. These are intended to alert FRCs and vendor/builders to areas that are particularly problematic to Tarion in terms of its complaints, claims and dispute resolution history.

The target level of review proposed by FRCs for the main category of each risk area is to be entered below the box marked 'Level of review'. Levels for the notional buildings have been entered for guidance. **The 'level of review' figure relates to 'Field Review' activity only.** 'Documentation Review' requires that Tarion be notified only of specific problem areas reported by a Prime Consultant. Where nothing of concern has been identified in such a report a note to that effect shall be provided at the relevant Milestone report stage.

Tarion will continuously monitor the relationship between review levels and construction problems and make adjustments to its requirements as necessary. FRCs will be notified of any such changes.

Fig.1 The Scope of Work table explained.

ITEM	RISK AREAS	RISK FACTORS		
		Documentation Review	Field Review	Level of review as % (30%)
1	BELOW GRADE/ FOUNDATIONS			
1.1	Earth bearing.	As required by design, adequate bearing capacity		
1.2	Substructure.	Reinforcing; concrete cover over steel		
1.3	Drainage systems.	Materials; coverage; connection to drain; clean outs	Materials	
1.4	Damp proofing or waterproofing		Materials; surface preparation; continuity; thickness; joint detailing/reinforcing; protection	
			Proposed number of visits	

A WORD ABOUT “VISITS”

No attempt has been made to prescribe what amount of time or level of activity constitutes a “visit”. The amount of time required to inspect one component could be very different from the amount of time needed to inspect another. Reliance will be placed on the professionalism and due diligence of FRCs to establish the number and duration of visits that will be required to properly carry out their duties. However, Tarion fully recognizes that more than one area of review can be conducted during one period of physical presence at a site. In such circumstances it will be acceptable for each area of review to be counted as a “visit” both for the purposes of the Scope of Work Proposal and for the 60 day and Milestone Reports.



Builder Bulletin 19R - Module 2A Scope of Work Proposal

PROJECT DETAILS

Project Name: _____

Common Element
Number (if available): _____

Address: _____

Vendor/Builder: _____ Vendor/Builder Ref. No.: _____

Start date (estimate): _____ Completion Date (estimate): _____

Number of Stories: _____ Levels of Garage Parking: _____

Building area (ft2) _____

Total exterior cladding in approx. ft2 (including windows and doors): _____

Exterior Cladding - Breakdown of type by %

1. _____ 2. _____ 3. _____

Number of: Window Systems _____ Assemblies _____ (if available)

Number of Exterior Door Systems Including Patio Doors: _____ (if available)

Balconies: YES NO Number of Balconies/Terraces Directly Above Residential Units: _____

Roofing Assembly Type: _____

Anchor Systems: _____

Number of Towers/Buildings: _____ Townhouses: YES NO

Special Features (e.g. atrium): _____

Structural Consultant: _____

Address: _____ / _____ / _____
NUMBER AND STREET UNIT/SUITE CITY

PROVINCE _____ POSTAL CODE _____

Telephone Number: _____ Fax Number: _____

E-mail: _____

Landscape Architect: _____

Address: _____ / _____ / _____
NUMBER AND STREET UNIT/SUITE CITY

PROVINCE _____ POSTAL CODE _____

Telephone Number: _____ Fax Number: _____

E-mail: _____

Interior Design Consultant: _____

Address: _____ / _____ / _____
NUMBER AND STREET UNIT/SUITE CITY

PROVINCE _____ POSTAL CODE _____

Telephone Number: _____ Fax Number: _____

E-mail: _____

Acoustical Consultant: _____

Address: _____ / _____ / _____
NUMBER AND STREET UNIT/SUITE CITY

PROVINCE _____ POSTAL CODE _____

Telephone Number: _____ Fax Number: _____

E-mail: _____

TESTING

List testing operations to be undertaken as appropriate.

Type of test	In House?		If No, Name of Company Conducting Test	Tel. No
Soil	Y	N		
Hydro-geological	Y	N		
Environmental	Y	N		
Concrete	Y	N		
Steel	Y	N		
Windows/Doors	Y	N		
Membranes	Y	N		
Other	Y	N	If other, please include details on a separate sheet.	
Acoustical consultant	Y	N		

Please continue to the Scope of Work Proposal tables that follow.

High-rise project forms follow on the next page. Townhouse projects start on page 33 of this Module.

SCOPE OF WORK PROPOSAL – HIGH-RISE PROJECTS**Level of Review/Work performed by FRC and/or Prime Consultant**

ITEM	RISK AREAS	RISK FACTORS		Level of review as %
		Documentation Review	Field Review	
1	BELOW GRADE/ FOUNDATIONS			(30%)
1.1	Earth bearing	As required by design, adequate bearing capacity		
1.2	Substructure	Reinforcing, concrete cover over steel		
1.3	Drainage systems	Materials; coverage; connection to drain; clean outs	Materials	
1.4	Damp proofing or waterproofing		Materials; surface preparation; continuity; thickness; joint /detailing/ reinforcing/ protection	
1.5	Insulation		Materials; continuity; protection	
1.6	Elevator sump pits	Drainage; access; appropriate certification		
			Proposed number of visits:	

ITEM	RISK AREAS	RISK FACTORS		Level of review as %
		Documentation Review	Field Review	
2	STRUCTURE			(40%)
2.1	Slabs; decks/beams; columns; walls	Post-tensioning/ protection from moisture	Column finish	
2.2	Expansion joints	Continuity; unimpeded movement; no binding	Materials; placement; installation	
2.3	Slab protection systems: Parking garage Surface	Concrete mix/admixtures; reinforcing steel-coatings; slope to drain; slope of slab-on-grade away from structural elements	Protection from corrosion problems related to de-icing salts; protection against leakage Traffic deck waterproofing system; upturns at terminations; seals at penetrations; joint sealing details; exterior ramp waterproofing/de-icing system; trench drain waterproofing; column/wall base protection at slab-on-grade	

ITEM	RISK AREAS	RISK FACTORS		Level of review as %
		Documentation Review	Field Review	
2.4	Balcony protection systems	Concrete cover over reinforcing	Appropriate concrete mix; drainage; toppings or mortar repair; surface preparation; materials and application; sealer or waterproofing	
2.4.1	Balcony guards	Correct materials; anchorage; anchor corrosion protection; height; maximum openings, etc.	Securement	
			Proposed number of visits:	

Section 3 – Exterior Closure

Cladding – Levels of effort will depend on the type and degree of occurrence of different types of cladding. For example, areas clad in EIFS will be more demanding of attention than areas clad in pre-cast concrete.

Windows – Tests shall be conducted on a representative sample of each window system type installed in the building. Testing of window systems will include patio doors.

ITEM	RISK AREAS	RISK FACTORS		Level of review as %
		Documentation Review	Field Review	
3	EXTERIOR CLOSURES			(50%)
3.1	Back-up wall; substrate		Materials; thicknesses; dimensions; corrosion protection; anchorage to structure; deflection/expansion/control joint details; clear widths	
3.2	Masonry veneer	Shelf angles; corrosion protection	Shelf angles; corrosion protection; securement; masonry units; connectors; control joints; locations; clear widths	
3.2.1	Precast concrete. (see Module 3A – Level of Review Guideline Tables re shop and site reviews)	Embedded anchors; corrosion protection; concrete quality	Anchorage; corrosion protection; joint widths; repairs	
3.2.2	Cast-in-place concrete	Control and expansion joints; concrete quality; concrete placement; curing; freeze protection; application	Treatment of honeycombing, cracks and form tie holes	
3.2.3	Siding (non-decorative)	Finishes; coatings; substrate; fasteners; corrosion protection	Materials; movement allowances	
3.2.4	Exterior Insulated Finish system (EIFS). (See Module 3A re shop and site reviews)	Review of details for EIFS, shop drawings for approval ensuring compliance with the OAA and Pro-Demnity design principles and requirements	Adhesives; fasteners; surface preparation; reinforcing; detailing; joint details; finish materials; application. Provide field mock up of EIFS for approval prior to installation.	

3.2.5	(ICF) insulated concrete form	Review applicable shop drawings for approval ensuring compliance with the OAA and Pro-Demnity design principles and requirements	Adhesives; fasteners; surface preparation; reinforcing; detailing; joint details; finish materials; application. Provide field mock up of ICF for approval prior to installation.	
3.2.6	Window wall	Review of details for window wall, shop drawings for approval ensuring compliance with the OAA and Pro-Demnity design principles and requirements	Adhesives; fasteners; surface preparation; reinforcing; detailing; joint details; finish materials; application. Provide field mock up of window wall for approval prior to installation.	
3.2.7	Load bearing masonry	Shelf angles; corrosion protection	Shelf angles; corrosion protection; securement; masonry units; connectors; control joints; locations; clear widths	
3.2.8	Curtain wall	Manufacturer's performance and installation specifications	Shelf angles; corrosion protection; securement; connectors; control joints; locations	
3.2.9	Other cladding systems	Contact Tarion		
3.3	Concealed protections		External flashings; sills Impermeable exterior components; continuity of external seals between components and at all joints Internal flashings; joint seals; end dams; moisture barriers; clear drainage to exterior; venting	
3.3.1	External sealants		Materials; surface preparation	
3.3.2	Soffits		Materials; thicknesses; dimensions; corrosion protection; anchorage to structure; deflection/expansion/control joint details	
3.3.3	Architectural coatings, finishes, paint	Materials; surface preparation; priming; application	Materials; surface preparation; priming; application	
3.4	Windows, glazing and exterior doors	Review of shop drawings and lab test reports of window systems	Wind, aid and water load testing; as well as anchorage, operation, hardware	
3.4.1	External sealants as related to 3.4		Materials; surface preparation	
3.5	Thermal insulation		Materials; securement; continuity, limit thermal bridges	
3.6	Air barrier; vapour retarder		Materials; securement; continuity; seals at slabs, interior walls, seals at all penetrations; windows; doors	
			Proposed number of visits:	

ITEM	RISK AREAS	RISK FACTORS		
		Documentation Review	Field Review	Level of review as %
4	ROOFING			(50%)
4.1	Membrane; shingles or sloped metal	Ventilation (if provided)	Materials; joint details/reinforcing; securement/adhesion; underlayment; ice damming protection; flashings; penetration seals	
4.2	Insulation; ballast		Materials; installation; continuity	
4.3	Vapour retarder; air barrier; ventilation		Materials; adhesion (if required); continuity, seals at walls and penetrations; ventilation (if provided)	
4.4	Drainage		Slope to drain	
4.5	Snow and ice control		Snow/ice guards	
4.6	Safety tie-back anchors for building maintenance	Locations; anchorage; corrosion protection; rope steps; sleeves	Pitch pockets – materials and application	
4.7	Green Roof intensive/extensive	Review design documents and specifications	Materials; installation; continuity in accordance with applicable law	
			Proposed number of visits:	

ITEM	RISK AREAS	RISK FACTORS		
		Documentation Review	Field Review	Level of review as %
5	FIRE SAFETY SYSTEMS			(75%)
5.1	Containment	Review design documents and specifications	Fire separations; materials; thicknesses; assembly; fastening; continuity; fire stopping; smoke seals; closures	
5.2	Egress	Corridors; stairwells; stairwell guards; pressurization systems (lighting – see 9.2); Review design documents and specifications	Fire separations; materials; thicknesses; assembly; fastening; continuity; fire stopping; smoke seals; closures	
5.3	Suppression	Stand pipes; fire hose cabinets; booster pumps; sprinkler systems		
5.4	Detection and alarm	Control panel and annunciator; heat, smoke and flow detectors; bells and horns; emergency voice communication		
5.5	Sound transmission	Review design document, sound transmission class rating of party walls, partitions, floor/ceiling	Material; thickness; arrangement of components; continuity; acoustic caulking/seals. Flanking transmission path(s); schedule of partitions/suites/units to be subject to field testing. Certified by qualified acoustical consultant.	
			Proposed number of visits:	

ITEM	RISK AREAS	RISK FACTORS		
		Documentation Review	Field Review	Level of review as %
6	INTERIOR FINISHES, COMMON AREAS			All common elements – visual review
6.1	Corridors and stairwells		Condition of flooring and walls, lighting fixtures and ceilings	
6.2	Party/common rooms		Condition of flooring, walls, ceilings, lighting fixtures and cabinetry	
6.3	Sauna/whirlpool/fitness. Barrier; ventilation	Function; equipment	Condition of finishes; functions; equipment	
6.4	Swimming pool	Function; equipment	Condition of finishes, function; equipment	
			Proposed number of visits:	

ITEM	RISK AREAS	RISK FACTORS		
		Documentation Review	Field Review	Level of review as %
7	CONVEYING SYSTEMS (ELEVATORS)	Condition of finishes; appropriate certification	Condition of finishes	Each unit.
7.1	Sound Transmission	Review design document, sound transmission class rating of party walls, partitions, floor/ceiling	Material; thickness; arrangement of components; continuity; acoustic caulking/seals. Flanking transmission path(s); schedule of partitions/suites/units to be subject to field testing by qualified consultants.	
			Proposed number of visits:	

Section 8 – Mechanical

Acoustics and labeling – At this time appropriate labeling and acoustical performance is reliant on the reports of the Prime Consultant associated with the project. However, acoustical performance and labeling are sources of regular complaint. Special attention should be paid to the reports relating to these issues.

ITEM	RISK AREAS	RISK FACTORS		
		Documentation Review	Field Review	Level of review as %
8	MECHANICAL			(10%)
8.1	Heating; ventilation; air conditioning	Central boilers; heat pumps; chiller; cooling tower; make-up air units; distribution piping; ductwork; insulation; acoustic isolation; exhaust systems; suite distribution; controls. Acoustics; labeling.	Labeling	
8.2	Plumbing – supply	Water service; metering; booster pumps; distribution piping; expansion joints; valves; securement; insulation; boilers; storage tanks; re-circulation pumps. Acoustics; labeling .	Labeling	
8.3	Plumbing – drainage	Storm and sanitary drains; sump pumps; clean-outs. Acoustics; labeling.	Labeling	
8.4	Waste disposal	Garbage chutes; chute doors; wash-down facilities; compactor. Acoustics; labeling.	Labeling	

8.5	Insulation	Materials; acoustics; fire stopping	Material; fire stopping	
8.6	Noise vibration	Central HVAC equipment noise/vibrations and unit/suite equipment impacts on the building and respective suites; pumps; garbage compaction; plumbing stacks; acoustic insulation materials; garbage chutes; acoustic planes; acoustic louvers; with OBC/ASHRAE and permit documents	Conformance with permit consultants	
			Proposed number of visits:	

Section 9 – Electrical

Labeling – Incomplete labeling is a regular source of complaint. Special attention should be paid to this area of review.

ITEM	RISK AREAS	RISK FACTORS		
		Documentation Review	Field Review	Level of review as %
9	ELECTRICAL			(10%)
9.1	Distribution systems	Switchgear; transformers; labeling and noise rating of transformers (in accordance with OBC/ASHREA)	Labeling	
9.2	Lighting	Corridor; lobby; stairwells; parking garage; intensity levels; emergency power supply; labeling	Labeling	
9.3	Emergency power	Generator; fuel storage; controls; ventilation; acoustic isolation; labeling; noise transmission through the structure and openings to the outside; vibration isolation or generators. (In accordance with OBC/ASHREA)	Labeling	
9.4	Intercom and security systems	Installation; function	Function	
9.5	Insulation	Material; acoustics; fire stopping and smoke seals	Material; fire stopping	
9.6	Noise Ratings of Transformers	Acoustic treatment/finishes of generator room building components; acoustic louvers; silencers; mufflers (all in accordance with OBC/ASHRAE)		
			Proposed number of visits:	

ITEM	RISK AREAS	RISK FACTORS		
		Documentation Review	Field Review	Level of review as %
10	SITE WORK			(10%)
10.1	Pavements; curbs	Materials; sub-base materials; thicknesses; compaction; drainage	Materials; sub-base materials; thicknesses; compaction; drainage	
10.2	Retaining walls	In conformance with design or manufacturer's drawings		
10.3	Landscape structures; (gazebos, decks)	Materials; foundations; construction; moisture protection; corrosion protection		
10.4	Fences	Materials; frost protection	Materials; frost protection	
10.5	Irrigation systems	In conformance with design and drawings		
10.6	Sod, trees and shrubs	Top soil	Top soil.	
			Proposed number of visits:	

SCOPE OF WORK PROPOSAL – MID RISE WOOD PROJECTS

Level of Review/work performed by FRC and/or Prime Consultant

ITEM	RISK AREAS	RISK	FACTORS
2	STRUCTURE	Documentation Review	Field Review
2.1	Slabs; decks/beams; columns; walls	Post-tensioning/ protection from moisture <i>Mid-Rise wood-framed buildings: Seismic loading, seismic protection system</i>	Column finish <i>Mid-Rise wood-framed buildings: Seismic protection system installation</i>
2.5	Wood/Steel Framing	<i>Mid-Rise wood-framed buildings: Correct materials, shrinkage control, balcony slope, differential movement with non-combustible components, Gas Deflation Progressive Collapse</i>	<i>Mid-Rise wood-framed buildings: Conformance with construction documents; shrinkage and differential movement control Site storage and handling of wood materials</i>
3.2.3	Siding (non-decorative)	Finishes; coatings; substrate; fasteners; corrosion protection <i>Mid-Rise wood-framed buildings: Non-combustible cladding Review of applicable fire/flame spread test reports of cladding materials prior to installing on building</i>	Materials; movement allowances <i>Mid-Rise wood-framed buildings: Non-combustible cladding Review of applicable fire/flame spread test reports of cladding materials prior to installing on building</i>
4.6	Safety tie-back anchors for building maintenance	Locations; anchorage; corrosion protection; rope steps; sleeves <i>condensation control/insulation in wood framed buildings</i>	Pitch pockets – materials and application, <i>condensation control/insulation in wood framed buildings</i>
5	FIRE SAFETY SYSTEMS	Documentation Review	Field Review
5.1	Containment	Review design documents and specifications	Fire separations; materials; thicknesses; assembly; fastening; continuity; fire stopping; smoke seals; closures; <i>review of mock-ups for typical fire stop details</i>
5.3	Suppression	Stand pipes; fire hose cabinets; booster pumps; sprinkler systems <i>Mid-Rise wood-framed buildings: Balcony sprinkler protection</i>	<i>Mid-Rise wood-framed buildings: Balcony sprinkler protection</i>

(Please read and complete certification on next page.)

CERTIFICATION

I undertake to carry out the documentation and field reviews at the time and in the manner outlined above. I will provide all documents and reports to Tarion in accordance with the terms attached to this firm's application for Bulletin 19R Qualification Status submitted to and approved by Tarion on ____/____/____ (enter date).

SIGNATURE OF FRC AUTHORIZED TO BIND FIRM

PRINT NAME

DATE

POSITION

VENDOR/BUILDER'S SIGNATURE

PRINT NAME

DATE

COMPANY

TELEPHONE

EMAIL

SCOPE OF WORK PROPOSAL – TOWNHOUSE PROJECTS**Level of Review/Work performed by FRC and/or Prime Consultant**

ITEM	RISK AREAS	RISK FACTORS		
		Documentation Review	Field Review	Level of review as %
1	BELOW GRADE/ FOUNDATIONS (For Townhouses over parkade)			(30%)
1.1	Earth bearing	As required by design; adequate bearing capacity		
1.2	Substructure	Reinforcing; concrete cover over steel		
1.3	Drainage systems – parkade	Materials; coverage; connection to drain; clean outs	Materials	
1.4	Damp proofing or waterproofing and		Materials; surface preparation; continuity; thickness; joint detailing/reinforcing; protection	
1.5	Insulation – parkade		Materials; continuity; protection	
1.5.1	Damp proofing or waterproofing and		Materials; surface preparation; continuity; thickness; joint detailing/reinforcing; protection	
1.5.2	Insulation – on grade		Materials; continuity; protection	
1.6	Elevator sump pits	Drainage; access; appropriate certification		
			Proposed number of visits:	

ITEM	RISK AREAS	RISK FACTORS		
		Documentation Review	Field Review	Level of review as %
2	STRUCTURE			(40%)
2.1	Slabs; decks; beams; columns; walls	Post-tensioning; protection from moisture	Column finish	
2.2	Expansion joints	Continuity; unimpeded movement; no binding	Materials; placement; installation	

ITEM	RISK AREAS	RISK FACTORS		
		Documentation Review	Field Review	Level of review as %
2.3	Slab protection systems; * Parking garage * Surface	Concrete mix/admixtures; reinforcing steel coatings; slope to drains; slope of slab-on-grade away from structural elements	Protection for corrosion problems related to de-icing salts; protection against leakage Traffic deck waterproofing system (if applicable); upturns at terminations; seals at penetrations; joint sealing details; exterior ramp waterproofing/de-icing system; trench drain waterproofing; column/wall base protection at slab-on-grade	
2.4	Balcony protection systems	Concrete over reinforcing	Appropriate concrete mix; drainage; toppings; or mortar repair; surface preparation; materials and application; sealer or waterproofing	
2.4.1	Balcony guards.	Correct materials; anchorage; anchor corrosion protection; height; maximum openings, etc.	Securement	
2.5	Wood/Steel Framing	Headers, built up beams and columns, spacing, grading of materials	Securement and conformance with construction documents	
			Proposed number of visits:	

Section 3 – Exterior Closure

Cladding – Levels of effort will depend on the type and degree of occurrence of different types of cladding. For example, areas clad in EIFS will be more demanding of attention than areas clad in pre-cast concrete.

Windows – Tests shall be conducted on a representative sample of each window system type installed in the building. Testing of window systems will include patio doors.

ITEM	RISK AREAS	RISK FACTORS		
		Documentation Review	Field Review	Level of review as %
3	EXTERIOR CLOSURE			(50%)
3.1	Back-up wall; substrate		Materials; thicknesses; dimensions; corrosion protection; anchorage to structure; deflection/expansion/control joint details; clear widths	
3.2	Masonry veneer	Shelf angles; corrosion protection	Shelf angles; corrosion protection; securement; masonry units; connectors; control joints; locations; clear widths	
3.2.1	Precast concrete – (see Module 3A re shop and site reviews)	Embedded anchors; corrosion protection; concrete quality	Anchorage; corrosion protection; joint widths; repairs	

ITEM	RISK AREAS	RISK FACTORS		
		Documentation Review	Field Review	Level of review as %
3.2.2	Cast-in-place concrete	Control and expansion joints; concrete quality; concrete placement; curing; freeze protection; application	Treatment of honeycombing, cracks and form tie holes	
3.2.3	Siding (non-decorative)	Finishes; coatings; substrate; fasteners; corrosion protection	Materials; movement allowances	
3.2.4	Exterior Insulated Finish Systems (EIFS) – (see Module 3A re shop and site reviews)		Adhesives; fasteners; surface preparation; reinforcing; detailing; joint details; finish materials; application	
3.2.5	Load bearing masonry	Shelf angles; corrosion protection	Shelf angles; corrosion protection; securement; masonry units; connectors; control joints; locations; clear widths	
3.2.6	Curtain wall	Manufacturer's performance and installation specifications	Shelf angles; corrosion protection; securement; connectors; control joints; locations	
3.2.7	Other cladding systems	Contact Tarion		
3.3	Concealed protections		External flashings; sills Impermeable exterior components; continuity of external seals between components and at all joints Internal flashings; joint seals; end dams; moisture barriers; clear drainage to exterior; venting	
3.3.1	External sealants		Materials; surface preparation	
3.3.2	Soffits		Materials; thicknesses; dimensions; corrosion protection; anchorage to structure; deflection/expansion/control joint details	
3.3.3	Architectural coatings, finishes, paint	Materials surface preparation; priming; application	Materials; surface preparation; priming; application	
3.4	Windows, glazing and exterior doors		Wind, air and water load testing; anchorage; operation; hardware	
3.4.1	External sealants		Materials; surface preparation	
3.5	Thermal insulation		Materials; securement; continuity; limit thermal bridges	
3.6	Air barrier, vapour retarder		Materials; securement; continuity; seals at slabs; interior walls; seals at all penetrations; windows; doors.	
			Proposed number of visits:	

ITEM	RISK AREAS	RISK FACTORS		
		Documentation Review	Field Review	Level of review as %
4	ROOFING			(50%)
4.1	Membrane; shingles or sloped metal.	Ventilation (If provided)	Materials; joint details/reinforcing; securement/adhesion; underlayment; ice damming protection; flashings; penetration seals.	
4.2	Insulation; ballast.		Materials; installation; continuity.	
4.3	Vapour retarder; air barrier; ventilation.		Materials; adhesion (if required); continuity; seals at walls and penetrations; ventilation (if provided).	
4.4	Drainage.		Slope to drain.	
4.5	Snow and ice control		Snow/ice guards	
4.6	Safety tie-back anchors for building maintenance.	Locations; anchorage; corrosion protection; rope steps; sleeves.	Pitch pockets – materials and application.	
4.7	Green Roof intensive/extensive	Manufacturer's performance and installation specifications.	Materials; installation; continuity in accordance with applicable law.	
			Proposed number of visits:	

ITEM	RISK AREAS	RISK FACTORS		
		Documentation Review	Field Review	Level of review as %
5	FIRE SAFETY SYSTEMS			(75%)
5.1	Containment	Acoustics between suites	Fire separations; materials; thicknesses; assembly; fastening; continuity; fire stopping; smoke seals; closures	
5.2	Insulation; ballast			
5.3	Suppression	Stand pipes; fire hose cabinets; booster pumps; sprinkler systems in parking garage and as appropriate		
5.4	Detection and alarm	Control panel and annunciator; heat, smoke and flow detectors; bells and horns; emergency voice communication		
5.5	Sound transmission	Review design document, sound transmission class rating of party walls, partitions, floor/ceiling	Material; thickness; arrangement of components; continuity; acoustic caulking/seals. Flanking transmission path(s); schedule of partitions/suites/units to be subject to field testing. Certified by qualified acoustical consultant.	
			Proposed number of visits:	

ITEM	RISK AREAS	RISK FACTORS		
		Documentation Review	Field Review	Level of review as %
6	INTERIOR FINISHES, COMMON AREAS			All common elements – visual review
6.1	Corridors and stairwells		Condition of flooring and walls, lighting fixtures and ceilings	
6.2	Party/common rooms		Condition of flooring, walls, ceilings, lighting fixtures and cabinetry	
6.3	Sauna/whirlpool/fitness	Function; equipment	Condition of finishes; function; equipment	
6.4	Swimming pool	Function; equipments	Condition of finishes; function; equipment	
			Proposed number of visits:	

ITEM	RISK AREAS	RISK FACTORS		
		Documentation Review	Field Review	Level of review as %
7	CONVEYING SYSTEMS (ELEVATORS)	Condition of finishes; appropriate certification.	Condition of finishes.	Each unit
7.1	Sound Transmission	Review design document, sound transmission class rating of party walls, partitions, floor/ceiling	Material; thickness; arrangement of components; continuity; acoustic caulking/seals. Flanking transmission path(s); schedule of partitions/suites/units to be subject to field testing by qualified consultants.	
			Proposed number of visits:	

Section 8 – Mechanical

Acoustic and labeling – At this time appropriate labeling and acoustical performance is reliant on the reports of the Prime Consultants associated with the project. However, acoustical performance and labeling are sources of regular complaint. Special attention should be paid to the reports relating to these issues.

ITEM	RISK AREA	RISK FACTOR		
		Documentation Review	Field Review	Level of review as %
8	MECHANICAL			(10%)
8.1	Heating; ventilation; air conditioning	All-in-ones; heat pumps; make-up air units; distribution piping; ductwork; insulation; acoustic isolation; exhaust systems; suite distribution; controls. Acoustics; labeling.	Labeling	
8.2	Plumbing – supply	Water service; metering; booster pumps; distribution piping; expansion joints; valves; securement; insulation; boilers; storage tanks; re-circulation pumps. Acoustics; labeling.	Labeling	

8.3	Plumbing install			
8.4	Waste disposal – where applicable.	Garbage chutes; chute doors; wash-down facilities; compactor. Acoustics; labeling.	Labeling	
8.5	Insulation	Materials; acoustics; fire stopping	Material; fire stopping	
8.6	Noise vibration	Central HVAC equipment noise/vibrations and unit/suite equipment impacts on the building and respective suites; pumps; garbage compaction; plumbing stacks; acoustic insulation materials; garbage chutes; acoustic planes; acoustic louvers; with OBC/ASHRAE and permit documents	Conformance with permit consultants	
			Proposed number of visits:	

Section 9 – Electrical

Labeling – Incomplete labeling is a regular source of complaint. Special attention should be paid to this area of review.

ITEM	RISK AREAS	RISK FACTORS		
		Documentation Review	Field Review	Level of review as %
9	ELECTRICAL			(10%)
9.1	Distribution systems.	Switchgear; transformers; labeling.	Labeling	
9.2	Lighting.	Corridor; lobby; stairwells; parking garage; intensity levels; emergency power supply; labeling.	Labeling	
9.3	Emergency power.	Generator; fuel storage; controls; ventilation; acoustic isolation; labeling.	Labeling	
9.4	Intercom and security systems.	Installation; function.	Function	
9.5	Insulation.	Material; acoustics; fire stopping and smoke seals.	Material; fire stopping	
9.6	Noise Ratings of Transformers	Acoustic treatment/finishes of generator room building components; acoustic louvers; silencers; mufflers (all in accordance with OBC/ASHRAE)		
			Proposed number of visits:	

ITEM	RISK AREAS	RISK FACTORS		
		Documentation Review	Field Review	Level of review as %
10	SITE WORK			(10%)
10.1	Pavements; curbs	Materials; sub-base materials; thicknesses; compaction; drainage	Materials; sub-base materials; thicknesses; compaction; drainage	
10.2	Retaining walls	In conformance with design or manufacturer's drawings		
10.3	Landscape structures (gazebos, decks)	Materials; foundations; construction; moisture protection; corrosion protection		
10.4	Fences	Materials; frost protection	Materials; frost protection	
10.5	Irrigation systems	In conformance with design and drawings		
10.6	Sod, trees and shrubs	Top soil	Top soil.	
			Proposed number of visits:	

(Please read and complete certification on next page.)

CERTIFICATION

I undertake to carry out the documentation and field reviews at the time and in the manner outlined above. I will provide all documents and reports to Tarion in accordance with the terms attached to this firm's application for Bulletin 19R Qualification Status submitted to and approved by Tarion on ____/____/____ (enter date).

SIGNATURE OF FRC AUTHORIZED TO BIND FIRM

PRINT NAME

DATE

POSITION

VENDOR/BUILDER SIGNATURE

PRINT NAME

DATE

COMPANY

TELEPHONE

FAX

EMAIL

Builder Bulletin 19R - Module 3

Scope of Work - Description of Notional Buildings

(For use in connection with Module 3a - Level of Review Guideline Tables)

To assist FRCs in assessing the appropriate level of effort to employ on high-rise condominium projects, Tarion has established an illustration of its expectations. This has been achieved by describing five notional buildings. While Tarion does not consider the notional buildings to be typical of construction projects falling within Bulletin 19R, they are intended to provide baselines from which appropriate levels of effort can be extrapolated and proposed.

Tarion has defined the notional buildings as having the following characteristics:

10-STOREY BUILDING

- Typical 6,000 ft² floor plate plus a 1,000 ft² mechanical/elevator room on the roof level
- 2 levels of underground parking with 9,000 ft² per level
- 6 units per typical floor and 5 units on the main floor for a total of 59 residential units
- Building height is approx. 95 feet from ground level based on a floor-to-floor height of 8.5 ft and a 9 ft mechanical room (Floor to floor height is the same for all buildings.)
- Concrete structure, building envelope components, and interior partitions

20-STOREY BUILDING

- Typical 6,000 ft² floor plate plus a 1,000 ft² mechanical/elevator room on the roof level
- 3 levels of underground parking with 9,000 ft² per level
- 6 units per typical floor and 5 units on the main floor for a total of 119 residential units
- Building height is 180 feet from ground level
- Concrete structure, building envelope components, and interior partitions

30-STOREY BUILDING

- Typical 6,000 ft² floor plate plus a 1,000 ft² mechanical/elevator room on the roof level
- 4 levels of underground parking with 9,000 ft² per level
- 6 units per floor 5 units on the main floor for a total of 179 residential units
- Building height is 270 feet from ground level
- Concrete structure, building envelope components, and interior partitions

STACKED MULTI-TOWNHOUSE

Each structure contains eight townhouse units of approximately 1,500 ft² each. The townhouse units are accessible from grade level and have an integral garage. The structural system for each building consists of Part 9 OBC stick construction with concrete foundations. Building envelope consists of masonry veneer with punched windows and a deck balcony for each unit.

MULTI-TOWNHOUSE OVER PARKADE

Consists of a townhouse building sitting atop an underground parkade. The townhouse building contains eight units. Each townhouse unit is approximately 1,500 ft² in size. The underground parkade is on one level and approximately 5,000 ft² in size. The residential buildings utilize Part 9 OBC stick construction for the structure. The parkade structure consists of concrete foundation walls and a concrete slab supporting the residential units above. Building envelope consists of masonry veneer with punched windows and a deck or balcony for each unit.

Builder Bulletin 19R - Module 3A Scope of Work 'Level of Effort' Guideline Tables

HIGH RISE PROJECTS

(Separate tables for LOWRISE DEVELOPMENTS START ON PAGE 46 of this Module)

ITEM	RISK AREAS	REQUIREMENT FOR TOTAL NUMBER OF VISITS	TYPICAL BUILDING EXAMPLE		
			10 STY	20 STY	30 STY
1	BELOW GRADE/ FOUNDATIONS				
1.1	Earth bearing	Documentation review			
1.2	Substructure	Documentation review			
1.3	Drainage systems	Documentation review PLUS Two visits per underground parkade. One visit to ensure structure adequately sloped and one to visit to confirm drainage after all appliances installed.	4	6	8
1.4	Damp proofing or waterproofing	Two visits per 6,000 ft ²	6	8	12
1.5	Insulation				
1.6	Elevator sump pits	Documentation review			

ITEM	RISK AREAS	REQUIREMENT FOR TOTAL NUMBER OF VISITS	TYPICAL BUILDING EXAMPLE		
			10 STY	20 STY	30 STY
2	STRUCTURE				
2.1	Slabs; decks; beams; columns walls	Documentation review PLUS 1 visit per project for review of finish	1	1	1
2.2	Expansion joints	Documentation review PLUS Two visits per underground parkade. One visit to review prep-work and one visit to review application.	4	6	8
2.3	Slab protection systems: * Parking garage * Surface	Documentation review PLUS Two visits per 20,000 ft ² of traffic coating. One visit to review slab prep and one visit to review application. (See note 2)	2	3	4
2.4	Balcony protection systems	Documentation review PLUS Greater of one visit per 4 floors to review preparation work	4	8	12
2.4.1	Balcony guards	PLUS greater of one visit per 4 floors to review finish work. Plus field balcony guard load test in accordance with applicable standards, one test per railing configuration.			

ITEMS	RISK AREAS	REQUIREMENT FOR TOTAL NUMBER OF VISITS	TYPICAL BUILDING EXAMPLE		
			10 STY	20 STY	30 STY
3	EXTERIOR CLOSURE				
3.1	Back up wall; substrate	1 visit per two floors	5	10	15
3.2	Masonry veneer	Documentation review PLUS Greater of one visit per every two floors or one visit per 8,000 sq. ft Masonry area. This will give the inspector the ability to review each of the required items simultaneously.	4	8	12
3.2.1	Precast concrete	Documentation review PLUS Shop review – greater of 1 visit per 5 floors of pre-cast or 1 visit Per 17, 5000 ft ² of pre-cast. This is based on assumption that the plant produces one floor of panels every two days. Site review – greater of 1 visit per 2 floors of pre-cast of 8,000 ft ² of pre-cast (see note 1). The builder shall ensure that panels remain open for inspection as needed.	2	4	6
			4	8	12
3.2.2	Cast-in-place concrete	Documentation review PLUS Greater of one visit per every 5 floors or one visit per 16,000 ft ² of cast-in-place concrete. This will provide the inspector the ability to review each of the required items simultaneously. (See note 2)	2	4	6
3.2.3	Siding (non-decorative)	Documentation review PLUS 1 visit per 1,000 ft ² to examine preparation PLUS 1 visit to examine finish. (See note 2) Review for details of EIFS shop drawings for approval.	As required		
3.2.4	Exterior Insulated Finish System (EIFS)	Site review – greater of 1 visit per 1.5 floors of EIFS or 5,000 ft ² of EIFS (see note 1). The builder shall ensure that panels remain open for inspection as needed. Additionally, this will permit the simultaneous inspection of in-situ works. Provide field mock up of EIFS for installation Approval. Shop review – greater of 1 visit per 5 floors of EIFS or 1 visit per 17,500 ft ² of EIFS (see note 1). This is based on an assumption that the plant produces one floor of panels every two days.	7	14	21
			2	4	6
3.2.5	ICF insulated concrete forms	Site review – greater of 1 visit per 1.5 floors of ICF or 5,000 ft of ICF (see note 1). This based on an assumption that the typical construction cycle of a tower will leave the panels exposed for inspection from within the building for two to three successor activities. Additionally, this will permit the simultaneous inspection of in-situ works. Provide field mock up of ICF for installation approval. Shop review – greater of 1 visit per 5 floors of ICF or 1 visit per 17,500 ft ² of ICF (see note 1). This is based on an assumption that the plant produces one floor of panels every two days.	7	14	21

3.2.6	Window wall system	Site review – greater of 1 visit per 1.5 floors of Window Wall or 5,000 ft of Window Wall (see note 1). The builder shall ensure that panels remain open for inspection as needed. Additionally, this will permit the simultaneous inspection of in-situ works. Provide field mock up of window wall for installation approval. Shop review – greater of 1 visit per 5 floors of Window Wall or 1 visit per 17,500 ft of Window Wall (see note 1). This is based on an assumption that the plant produces one floor of panels every two days.	7	14	21
3.2.7	Load bearing masonry	Documentation review PLUS Greater of one visit per every second floor or one visit per 8,000 ft ² of load bearing veneer. This will provide the inspector the ability to review each of the required items simultaneously.	4	8	12
3.2.8	Curtain wall	Documentation review PLUS Erection – greater of 1 visit per 2 floors or 7,000 ft ² of curtain wall. The builder shall ensure the curtain wall remains exposed for inspection as needed. Finishing – 1 visit per 50,000 ft ² of curtain wall building envelope area. This is the maximum amount of building envelope area that can be reviewed in one visit (See note 2)	5	10	15
3.2.9	Other cladding systems	Contact Tarion			
3.3	Concealed protections	1 visit per 2 floors	5	10	15
3.3.1	External sealants	For EIFS – 1 visit per 50,000 ft ² . Other systems – 1 visit per 75,000 ft. (See note 2 for both)	6 8	4 18	12 12
3.3.2	Soffits	1 visit per 500 ft ² to examine preparation PLUS one visit per 500 ft to examine finish (See note 2)	As required		
3.3.3	Architectural coatings, finishes, paint.	Documentation review PLUS 1 visit per 1,000 ft for preparation PLUS 1 visit per 1,000 ft for finish. (See note 2)	As required		
3.4	Windows, glazing and exterior doors.	Documentation review of shop drawings and lab test reports of window systems, PLUS Greater of one visit per two floors or one visit per 15,000 ft ² of floor area. The builder will leave the window and patio door fastening method exposed for inspection as needed. Minimum of 4 window tests in the field for water resistance.	5	10	15
3.4.1	External sealants (as related to 3.4)	1 visit per two floors to review sealant finish for 1 of each window type	5	10	15
3.5	Thermal insulation	1 visit per every three floors	3	7	10
3.6	Air barrier; vapour retarder	1 visit per every three floors			

ITEM	RISK AREAS	REQUIREMENT FOR TOTAL NUMBER OF VISITS	TYPICAL BUILDING EXAMPLE		
			10 STY	20 STY	30 STY
4	ROOFING				
4.1	Membrane; shingles or sloped metal	Documentation review (ventilation) PLUS 1 pre-application and flashing visit PLUS 1 visit per 1,500 ft ² . Assumptions based on daily inspections for a roofing crew completing 1,500 ft ² per day. (See note 2.)	5	5	5
4.2	Insulation; ballast.	1 visit per 6,000 ft ² of roof. Based on a roofing crew undertaking 6,000 ft per day. (See note 2)	1	1	1
4.3	Vapour retarder; air barrier; ventilation	1 visit per 3,000 ft ² (See note 2)	2	2	2
4.4	Drainage	1 visit per project	1	1	1
4.5	Snow and ice control	1 visit per project	1	1	1
4.6	Safety tie-back anchors for building maintenance	Documentation review PLUS 1 visit to review materials and application for pitch pockets	1	1	1
4.7	Green roof intensive/extensive	Documentation review PLUS 1 visit to review materials and application all in accordance with applicable law			

ITEM	RISK AREA	REQUIREMENT FOR TOTAL NUMBER OF VISITS	TYPICAL BUILDING EXAMPLE		
			10 STY	20 STY	30 STY
5	FIRE SAFETY SYSTEMS				
5.1	Containment	Documentation review PLUS The greater of 1 visit per every two floors or 20,000 ft ² (See note 2)			
5.2	Egress	Documentation review. PLUS The greater of 1 visit per every 2 floors or 20,000 ft ² . (See note 2)			
5.3	Suppression				
5.4					
	Detection and alarm				
5.5	Sound Transmission.	Review design documents; sound transmission class rating of party walls, partitions, floor/ceiling. Material; thickness; arrangement of components; continuity; acoustic caulking/seals. Flanking transmission path(s); schedule of partitions/suites/units to be subject to field testing and certification by qualified acoustical consultant.	4	5	6

ITEM	RISK AREAS	REQUIREMENT FOR TOTAL NUMBER OF VISITS	TYPICAL BUILDING EXAMPLE		
			10 STY	20 STY	30 STY
6	INTERIOR FINISHES, COMMON AREAS				
6.1	Corridors and stairwells	Documentation review for 6.3, 6.4 and 6.5 PLUS Number of visits required to complete walkthrough of all areas			
6.2	Party/common rooms				
6.3	Sauna/whirlpool/ Fitness				
6.4	Swimming pool				
6.5	Sound transmission	Review design documents, sound transmission class rating of party walls, partitions, floor/ceiling. Material; thickness; arrangement of components; continuity; acoustic caulking/seals. Flanking transmission path(s); schedule of partitions/suites/units to be subject to field testing and certification by a qualified acoustical consultant.	4	5	6

ITEM	RISK AREAS	REQUIREMENT FOR TOTAL NUMBER OF VISITS	TYPICAL BUILDING EXAMPLE		
			10 STY	20 STY	30 STY
7	CONVEYING SYSTEMS (ELEVATORS)				
		Documentation review PLUS 1 visit for inspection of finishes	1	1	1

ITEM	RISK AREAS	REQUIREMENT FOR TOTAL NUMBER OF VISITS	TYPICAL BUILDING EXAMPLE		
			10 STY	20 STY	30 STY
8	MECHANICAL				
8.1	Heating; ventilation; air conditioning Plumbing – supply Plumbing – drainage Waste disposal Insulation	Documentation review PLUS 1 visit per parkade and 1 visit per every 4 floors to confirm Placement of labeling	4	8	12
8.2					
8.3					
8.4					
8.5					
8.6	Mechanical noise vibration	Central HVAC equipment noise/vibrations and unit/suite equipment impacts on the building and respective suites; pumps; garbage compaction; plumbing stacks; acoustic insulation materials; garbage chutes; acoustic planes; acoustic louvers; acoustic enclosures; (all in accordance with OBC/ASHRAE) Labelling; installation; clearances; materials; thickness; degree of isolation/flexibility specified.	4	5	6

ITEM	RISK AREAS	REQUIREMENT FOR TOTAL NUMBER OF VISITS	TYPICAL BUILDING EXAMPLE		
			10 STY	20 STY	30 STY
9	ELECTRICAL				
9.1	Distribution systems Lighting Emergency power Intercom and security systems Insulation	Documentation review PLUS 1 visit per parkade and 1 visit per every 4 floors to confirm Placement of labeling	4	8	12
9.2					
9.3					
9.4					
9.5					
9.6	Noise Rating of transformers	Acoustic treatment/finishes of generator room building components; acoustic louvers; silencers; mufflers (all in accordance with OBC/ASHRAE)	4	5	6

ITEM	RISK AREAS	REQUIREMENT FOR TOTAL NUMBER OF VISITS	TYPICAL BUILDING EXAMPLE		
			10 STY	20 STY	30 STY
10	SITE WORK				
10.1	Pavements; curbs	Documentation review PLUS 1 visit to confirm sub-grade preparation PLUS 1 visit during installation PLUS one visit upon completion	3	3	3
10.2	Retaining walls				
10.3	Landscape structures (gazebos, decks)				
10.4	Fences				
10.5	Irrigation systems	Documentation review			
10.6	Sod, trees and shrubs	Documentation review PLUS 1 visit to confirm top-soil	1	1	1

Note 1: Wall cladding area excludes deductions for window openings, etc.

Note 2: Where visit numbers within these guidelines are determined by area and a real project's floor or cladding area is less than the figure quoted for a particular risk sub-category, the FRC should assume the minimal level of effort to be equivalent to the number of visits given for a ten storey, notional building. Where visit levels are still felt to be too high as a result of applying this rule the FRC should contact Tarion's Condominium Group at the address shown on page 3 of this bulletin.

TOWNHOUSE PROJECTS

The recommended visit levels for townhouses have been calculated on the basis that construction consists of a single block. Where multiple blocks are being constructed one visit can be used to review a representative sample of the same risk area in multiple blocks. The representative sample must provide a level of review that is sufficient to ensure the spirit and intent of the construction documents is being realized and that component performance meets or exceeds current construction standards. If you require further guidance please contact Tarion's Condominium Group.

ITEM	RISK AREAS	REQUIREMENT FOR TOTAL NUMBER OF VISITS	TYPICAL BUILDING EXAMPLE	
			STACKED MULTI-T/H	MULTI-T/H OVER PARKADE
1	BELOW GRADE/ FOUNDATIONS			
1.1	Earth bearing	Documentation Review	N/A	N/A
1.2	Substructure	Documentation Review	N/A	N/A
1.3	Drainage systems – parkade	Two visits to underground parkade. One visit to ensure structure adequately sloped and one visit to confirm drainage after all appliances installed	N/A	2
1.3.1	Drainage systems – on grade	One visit to review foundation drains	1	N/A
1.4	Dampproofing or waterproofing and insulation – parkade	Two visit per 6,000 ft ²	N/A	2
1.5				
1.5.1	Dampproofing or waterproofing and insulation – on grade	One visit per block	1	N/A
1.5.2				
1.6	Elevator sump pits	Documentation review	N/A	N/A

ITEM	RISK AREAS	REQUIREMENT FOR TOTAL NUMBER OF VISITS	TYPICAL BUILDING EXAMPLE	
			STACKED MULTI-T/H	MULTI-T/H OVER PARKADE
2	STRUCTURE			
2.1	Slabs; decks; beams; columns; walls	Documentation review PLUS one visit per project for review of finish	N/A	1
2.2	Expansion joints	Two visits to underground parkade. One visit to review prep-work and one visit to review application.	N/A	2
2.3	Slab protection systems: * Parking garage * Surface	Two visits per 5,000 ft ² of traffic coating. One visit to review slab prep and one visit to review application.	N/A	2
2.4	Balcony protection systems	Documentation review PLUS one visit to review preparation work PLUS one visit to review finish work	2	2
2.4.1	Balcony guards			
2.5	Wood framing	Documentation review PLUS two visits to review installation	2	2

ITEM	RISK AREAS	REQUIREMENT FOR TOTAL NUMBER OF VISITS	TYPICAL BUILDING EXAMPLE	
			STACKED MULTI-T/H	MULTI-T/H OVER PARKADE
3	EXTERIOR CLOSURE			
3.1	Back-up wall; substrate	One visit	1	1
3.2	Masonry veneer	Documentation review PLUS one visit	1	1
3.2.1	Precast concrete	Documentation review PLUS Shop Review – one visit per block	2	2
3.2.2	Cast-in-place concrete	One visit per block	1	1
3.2.3	Siding (non-decorative)	One visit per block	1	1
3.2.4	Exterior Insulated Finish System (E.I.F.S.)	Shop Review – one visit per block Site Review – two visits per block	1 2	1 2
3.2.5	Load bearing masonry	Documentation review PLUS one visit per block	1	1
3.2.6	Curtain wall	Documentation review PLUS Erection – One visit per block Finishing – One visit per block	1 1	1 1
3.2.7	Other cladding systems	Contact Tarion	N/A	N/A
3.3	Concealed protections	One visit per block	1	1
3.3.1	External sealants	EIFS – two visits per block Other Systems – one visit per block	2 1	2 1
3.3.2	Soffits	One visit per 1,000 ft ² of soffit to allow a viewing of ongoing installation and finishing	As required	As required
3.4	Windows, glazing and exterior doors	Documentation review of shop test reports PLUS one visit per block	1	1
3.4.1	External sealants (as related to 3.4)	One visit per block	1	1
3.5	Thermal Insulation	One visit per block	1	1
3.6	Air barrier, vapour retarder			

ITEM	RISK AREAS	REQUIREMENT FOR TOTAL NUMBER OF VISITS	TYPICAL BUILDING EXAMPLE	
			STACKED MULTI-T/H	MULTI-T/H OVER PARKADE
4	ROOFING			
4.1	Membrane, shingles or sloped metal	Documentation review PLUS three visits per block. One visit each for review of preparation, application and Finishing/flashing	3	3
4.2	Insulation; ballast	One visit per block.	1	1
4.3	Vapour retarder; air barrier; ventilation	One visit per block	1	1
4.4	Drainage	One visit per block	1	1
4.5	Snow and ice control	One visit per project	1	1
4.6	Safety tie-back anchor for building maintenance	Documentation review plus one visit to review installation (if applicable)	1	1
4.7	Green roof Intensive/extensive	Documentation review plus one visit to review installation (if applicable) all in accordance with applicable laws	1	1

ITEM	RISK AREAS	REQUIREMENT FOR TOTAL NUMBER OF VISITS	TYPICAL BUILDING EXAMPLE	
			STACKED MULTI-T/H	MULTI-T/H OVER PARKADE
5	FIRE SAFETY SYSTEMS			
5.1	Containment	Documentation Review PLUS one visit per block	1	1
5.2	Insulation	Documentation Review PLUS one visit per project to review testing of systems	1	1
5.3	Suppressio			
5.4	Detection & alarm			

ITEM	RISK AREAS	REQUIREMENT FOR TOTAL NUMBER OF VISITS	TYPICAL BUILDING EXAMPLE	
			STACKED MULTI-T/H	MULTI-T/H OVER PARKADE
6	INTERIOR FINISHES, COMMON AREAS			
6.1	Corridors & Stairwells	Documentation Review of 6.3, 6.4 and 6.5 PLUS number of Visits required to complete walkthrough of all areas	As required	
6.2	Party/common rooms.			
6.3	Sauna/whirlpool/ Fitness			
6.4	Swimming pool			
6.5	Sound Transmission	Review design documents, sound transmission class rating of party walls, partitions, floor/ceiling. Material; thickness; arrangement of components; continuity; acoustic caulking/seals. Flanking transmission path(s); schedule of partitions/suites/units to be subject to field testing.		

ITEM	RISK AREAS	REQUIREMENT FOR TOTAL NUMBER OF VISITS	TYPICAL BUILDING EXAMPLE	
			STACKED MULTI-T/H	MULTI-T/H OVER PARKADE
7	CONVEYING SYSTEMS			
		Documentation review PLUS one visit for inspection of finishes	N/A	1

ITEM	RISK AREAS	REQUIREMENT FOR TOTAL NUMBER OF VISITS	TYPICAL BUILDING EXAMPLE	
			STACKED MULTI-T/H	MULTI-T/H OVER PARKADE
8	MECHANICAL			
8.1	Heating ventilation & air conditioning	Documentation review PLUS one visit to parkade and one visit per block to review labeling	1	2
8.2	Plumbing supply			
8.3	Plumbing install			
8.4	Waste disposal			
8.5	Insulation			

ITEM	RISK AREAS	REQUIREMENT FOR TOTAL NUMBER OF VISITS	TYPICAL BUILDING EXAMPLE	
			STACKED MULTI-T/H	MULTI-T/H OVER PARKADE
9	ELECTRICAL			
9.1	Distribution systems	Documentation review PLUS one visit to parkade and one visit per block to review labeling	1	2
9.2	Lighting			
9.3	Emergency power			
9.4	Intercom and security systems			
9.5	Insulation			

ITEM	RISK AREAS	REQUIREMENT FOR TOTAL NUMBER OF VISITS	TYPICAL BUILDING EXAMPLE	
			STACKED MULTI-T/H	MULTI-T/H OVER PARKADE
10	SITE WORK			
10.1	Pavement, Curbs	One visit to confirm sub-grade preparation PLUS one Visit during installation PLUS one visit upon completion	3	3
10.2	Retaining walls			
10.3	Landscape structures (gazebos, decks)			
10.4	Fences			
10.5	Irrigation systems	Documentation review	N/A	N/A
10.6	Sod, trees and shrubs	Documentation review PLUS one visit to confirm top soil	1	1
10.7.	Site services	Documentation review PLUS one visit for review of installation including labeling/accessibility of valve and other relevant fixtures	1	N/A

Builder Bulletin 19R - Module 4 Field Review Consultant Reporting Requirements

This module of Bulletin 19R contains information about 60 Day and Milestone Reports. Information about other reporting requirements and a full set of report templates will be found in the subsequent sub-modules 4a through 4d. The use of standardized report templates will establish greater consistency in the quality and content of reports received by the Tarion Warranty Corporation ("Tarion").

60 DAY REPORTS

These reports provide Tarion with skeleton information about the ongoing progress of a construction project. They help assess whether or not a project is on schedule and provide FRCs with an early opportunity to bring any project issues to the attention of Tarion if it is felt necessary to do so.

An explanation of due dates and submission of 60 Day Reports is given at the top of the template found in Module 4b.

MILESTONE REPORTS

Milestone Reports provide Tarion with detailed information about the progress of a project, a mechanism that shows risk areas are being monitored and that deficiencies are being appropriately dealt with.

Tarion acknowledges that vendors/builders and FRCs often work together to rectify outstanding issues without the need to resort to formal reporting procedures. Outstanding issues/deficiencies will remain matters for practical resolution by agreement between the FRC and vendor/builder until such time as they cannot or have not been rectified and a Milestone Report falls due. Every effort should be made to rectify reported deficiencies before the next Milestone Report due date. (For an explanation of deficiencies as they relate to Bulletin 19R and when they become reportable, please see the explanation entitled "Deficiency: How it's defined and when to report one" appended to the end of this module.)

WHEN TO SUBMIT A MILESTONE REPORT

Milestone Reports become due at specified stages of construction. Tarion's Condominium Group must receive the reports no later than 30 days after the described milestone is reached (see below). The milestone trigger points are:

1. Sub-structure complete including completion of the at grade slab over the underground parking (if applicable).
2. Super structure complete (self explanatory).
3. Building envelope 75% complete including completion of cladding and roofing.
4. Building substantially watertight.
5. Bulletin 19R Final Report (submitted by the vendor/builder). Refer to Module 4D for a full explanation of the Final Report.

Where the event based milestone trigger points fail to provide a sufficient flow of information, Tarion reserves the right to request time based Milestone Reports. An example of where such a request might be made is where long construction delays lead to a marked extension of the construction schedule. In determining when it is appropriate to request a time based Milestone Report Tarion will consider each case on its merits.

Tarion will review the Milestone Report within 30 days of receipt and notify the FRC and vendor/builder of anything that warrants further discussion or investigation.

Nothing in the Milestone Reporting mechanism is intended to replace the FRC's internal project tracking systems. Tarion will continue to expect full access to these records when necessary although such requests are likely to be rare.

HOW TO SUBMIT A MILESTONE REPORT

The Initial Milestone report is a two part report. The first part is a Milestone Report Tracking Summary. This gives summary information about new deficiencies that are in existence at the time the Milestone Report falls due.

The second part is the Narrative Report Sheet. This provides FRCs with additional space to enter free-text narrative relating to any issue already referenced on the Tracking Summary.

On subsequent Milestone Reports a third sheet is required. This is the Deficiency Resolution Tracking Sheet. This lists all deficiencies that were outstanding at the previous Milestone Report and provides information about progress made in dealing with the previously identified deficiencies. It too may be used in conjunction with Narrative Report Sheets.

Copies of the sheets are attached to this module.

Builder Bulletin 19R - Appendix to Module 4 'Deficiency': How it's Defined and When to Report One

OUTLINE

These guidelines provide an objective method to help FRCs and vendors/builders decide when an outstanding construction issue becomes reportable as a deficiency. The process uses a number of trigger points that convert outstanding issues or defects into 'reportable deficiencies'. In this way the subjective element associated with making 'report' or 'not to report' decisions is removed. Reporting of deficiencies will be done at the Milestone Report stages.

STANDARDIZING TERMINOLOGY

What term is used to describe an outstanding issue, defect or deficiency before the trigger points take effect will not impact upon Tarion's view of the project.

The generally accepted term in the construction industry for quality and conformance problems is 'deficiency'. Use of the term appears to have been avoided in dealings with Tarion because of the perceived potential for creating delays in the release of security. This system addresses such concerns and should remove the understandable reluctance of vendor/builders to have day-to-day construction problems called deficiencies.

Tarion encourages the use of standardized language to remove potentials for confusion between agencies concerned with monitoring of identified risk areas. However, Tarion respects the right of FRC firms to use whatever terms they wish when recording construction problems for internal tracking purposes.

DEFICIENCY FOR THE PURPOSES OF BULLETIN 19R

"A deficiency can exist in functional performance or in physical characteristics; it can arise from design, faulty manufacture, assembly or installation. The existence of a deficiency may be established by physical evidence, from proof of a functional failure of a product while in use or, in the professional opinion of an FRC, the likely functional failure of a product at some future date or any other matter which exposes Tarion to a potential claim under the warranty provisions of the Ontario New Home Warranties Plan Act."

TRIGGER POINTS

All deficiencies/outstanding issues/defects (see 'Standardizing Terminology' above) become reportable in any of the following circumstances:

1. When a Milestone Report becomes due.
2. When the Final Report comes due.
3. When one or more of the Prime Consultants reports something they describe as a deficiency.
4. When an FRC has reason to believe that a contractor responsible for completion of a given task has permanently left the site and work on that task remains to be done.
5. When a contractor claims completion of a task but, in the opinion of the FRC, that task is not satisfactorily completed.
6. When a deviation from the approved construction documents (including supplementary documents e.g. site instructions, change notices, etc.) or intent of the Architect or Engineer is noted and the change has not been properly approved.
7. When a contractor accepts work done on a sub-strate by another contractor and that person knew or ought reasonably to have known that the quality of the sub-strate work may adversely affect the performance of his or her own work.
8. Any other event or issue that, in the opinion of the FRC, is embraced by the description of the term 'deficiency' and should be reported because of the potential exposure of Tarion to a claim under the warranty provisions.

Builder Bulletin 19R – Appendix to Module 4 Design Review

TIMING

Not less than 30 days prior to the commencement of construction of the condominium project the vendor/builder must deliver copies of each of the Design Certificates to Tarion. Completed certificates may be provided on a phased basis but each must be submitted by the vendor/builder to Tarion at least 30 days prior to the commencement of the work covered by that portion of the design. A sample Design Certificate is appended to this module.

These certificates verify that the design of the condominium project has been reviewed by the professionals responsible for the design of those elements of the construction for which they are responsible. Design Certificates should relate to the identified risk areas laid out in the Scope of Work:

- Below grade / foundations
- Structure
- Exterior closure
- Roofing
- Fire safety systems
- Interior finishes
- Conveying systems
- Mechanical systems
- Electrical systems
- Site work

Unlike the Field Review Consultant, the design team professionals are not required to provide ongoing reports to Tarion. However, the Field Review Consultant may require continuing assistance from the design team during the construction phase to ensure a clear understanding and interpretation of the design documents is maintained.

This bulletin is in no way intended to replace or set off the requirements of Part 2 of the Ontario Building Code which sets out specific requirements for design general review by architects and professional engineers. The provisions of this bulletin are in addition to those requirements. Architects and Engineers are still obligated under the Ontario Building Code and should continue to work with the Municipal Building Department in honouring that obligation.



Builder Bulletin 19R – Appendix to Module 4A Design Certificate (For use in connection with Bulletin 19R Design Review)

This form must be submitted to the Tarion’s Condominium Group not less than 30 days prior to the commencement of construction of the relevant part(s) of the project and must be accompanied by:

1. A copy of the professional’s Certificate of Authorization or Practice as applicable (**see note 1 below**) AND
2. Proof of current professional liability insurance in keeping with the requirements of his/her professional association.

Name of Project: _____ Enrolment No.: _____

Project Address: _____

Vendor/Builder Name: _____

Vendor/Builder Reference No: _____

RISK AREAS

Initial those areas that have been designed by the Professional Engineer or Architect identified overleaf and that are the subject of this declaration. Cross out risk areas that are the responsibility of others.

ITEM	RISK AREAS	DESIGN PROFESSIONALS INITIALS WHERE WORK MEETS TERMS OF THE DECLARATION
1	BELOW GRADE/FOUNDATIONS	
1.1	Earth bearing	
1.2	Substructure	
1.3	Drainage systems	
1.4	Damp proofing or waterproofing	
1.5	Insulation	
1.6	Elevator Sump Pits	

2	STRUCTURE	
2.1	Slabs; decks; beams; columns; walls	
2.2	Expansion joints	
2.3	Slab protection systems	
2.4	Balcony protection systems	
2.4.1	Balcony guards	
3	EXTERIOR CLOSURE	
3.1	Back-up wall; substrate	
3.2	Masonry veneer	

3.2.1	Precast concrete	
3.2.2	Cast-in-place concrete	
3.2.3	Siding (non-decorative)	
3.2.4	Exterior Insulated Finish System (EIFS)	
3.2.5	Load bearing masonry	
3.2.6	Curtain wall	
3.2.7	Other cladding systems	
3.3	Concealed protections	
3.3.1	External sealants	
3.3.2	Soffits	
3.3.3	Architectural coatings; finishes; paint	
3.4	Windows; glazing and exterior doors	
3.4.1	External sealants	
3.5	Thermal insulation	
3.6	Air barrier; vapour retarder	
4	ROOFING	
4.1	Membrane; shingles or sloped metal	
4.2	Insulation; ballast	
4.3	Vapour retarder; air barrier; ventilation	
4.4	Drainage	
4.5	Snow and ice control	
4.6	Safety tie-back anchors for building maintenance	
4.7	Green Roof intensive/extensive	
5	FIRE SAFETY SYSTEMS	
5.1	Containment	
5.2	Egress	
5.3	Suppression	
5.4	Detection and alarm	
5.5	Sound transmission	

6	INTERIOR FINISHES, COMMON AREAS	
6.1	Corridors and stairwells	
6.2	Party/common rooms	
6.3	Sauna/whirlpool/fitness	
6.4	Swimming pool	
7	CONVEYING SYSTEMS (ELEVATORS)	
7.1	Sound transmission	
8	MECHANICAL	
8.1	Heating; ventilation; air conditioning	
8.2	Plumbing – supply	
8.3	Plumbing – drainage	
8.4	Waste disposal	
8.5	Insulation	
8.6	Noise/vibration	
9	ELECTRICAL	
9.1	Distribution systems	
9.2	Lighting	
9.3	Emergency power	
9.4	Intercom and security systems	
9.5	Insulation	
9.6	Noise rating of transformers	
10	SITE WORK	
10.1	Pavements; curbs	
10.2	Retaining walls	
10.3	Landscape structures (gazebos, decks)	
10.4	Fences	
10.5	Irrigation systems	
10.6	Sod, trees and shrubs	

Prime Consultants who are architects shall adhere to the requirements of the annual practice professional liability insurance policies issued by Pro-Demnity Insurance Company for architects domiciled in Ontario and the requirements of any excess insurance provider's insurance policy respecting the insurability of exterior above-grade walls. For greater certainty, Prime Consultants who are architects shall avoid any design of an exterior above-grade that would be excluded from professional liability insurance coverage respecting water ingress or ingress of precipitation by the Pro-Demnity Insurance Company annual practice policies issued to Ontario architects including any endorsements thereto. Designs shall conform to the insurability requirements of the Pro-Demnity policies respecting water ingress or ingress of precipitation regardless of who may be the provider of the Prime Consultant's insurance, and it shall be the Prime Consultant's responsibility to ascertain the full content of the Pro-Demnity policies and any relevant endorsements.

CERTIFICATION

I, _____, the undersigned, being authorized in the Province of Ontario to provide professional services by virtue of a Certificate of Authorization (as issued by the Professional Engineers of Ontario) or a Certificate of Practice (as issued by the Ontario Architects Association) hereby declare that I have read and understand the requirements under Builder Bulletin 19R for the design review and certification and, with specific reference to the risk areas that I have initialed above I have been engaged by the above referenced vendor/builder to provide my professional services in connection with the condominium project also identified above. Specifically, I am responsible for the production of all relevant construction documents for the above mentioned condominium project and shall provide copies of all significant change order and reports on site inspections to the FRC. I further declare that my portion of the design substantially complies with the Ontario Building Code and good design practice and in my view contains sufficient detail to enable work to be completed in keeping with the intention of my design. I am in a position to bind this firm.

SIGNATURE: _____

PRINT NAME: _____

DESIGN FIRM: _____

ADDRESS: _____

TELEPHONE: _____



Builder Bulletin 19R - Module 4B 60 Day Report

60 Day Report No.:

For the period: _____ From: _____ To: _____

Tarion's Condominium Group must receive this report no later than 14 days after the due date. Initial due dates fall at the end of every 60 day period following the start of construction until the first Milestone Report is completed. Subsequent 60 Day Reports will be submitted 60 days after each Milestone Report becomes due and every 60 days thereafter. No 60 Day Report will be required where a Milestone Report falls due during a 60 day period.

Project Address: _____

FRC Name and Contact No.: _____

Common Element No.: _____

Vendor/Builder Reference No.: _____

Consultant's Project Reference No.: _____

Risk Area	Checked Y / N	Ref. No. of items requiring follow up review	Visits to date	% Compl.	On Sched?
Below grade					
Structure					
Exterior closure					
Roofing					

Risk area	Checked Y / N	Ref. No. of items requiring follow up review	Visits to date	% Compl.	On Sched?
Fire safety systems					
Interior finishes, common areas					
Conveying systems (elevators)					
Mechanical and electrical					
Site work					

ADDITIONAL COMMENTS:

FRCs are asked to provide information as part of Tarion's ongoing quality assurance program under Builder Bulletin 19R. Items of particular concern should be noted in the third column of the above table and expanded upon under additional comments. Any items that remain outstanding when a Milestone Report becomes due must be included in that report. Where activity in a focus area is evidently falling behind schedule the extent of the delay and its likely impact on the project e.g. delaying of Milestone Reports, extending of the construction schedule, etc. should be noted under additional comments. Explanation % is related to the % of construction completed at the time of the visit or inspection and On Schedule is keeping with the construction schedule of the project.

SIGNATURE AND NAME OF CONSULTANT SUBMITTING REPORT:

SIGNATURE

PRINT NAME



Builder Bulletin 19R - Module 4C Milestone Report- Tracking Summary (Append to Narrative Report)

Project Names: _____ Common Element No.: _____

Milestone Report No.: _____ Dated: _____

Vendor/Builder: _____ Vendor/Builder Ref. No.: _____

List by reference number all deficiencies that were outstanding at the last Milestone Report. Where the deficiency has been rectified give a brief statement as to how this was done. If the deficiency is still not resolved please indicate the reason. Please indicate if matter was subject to any of the following construction anomaly, a site corrective measure and/or a Change Order. Please give references as appropriate.

Milestone Ref. No.	FRC Ref. No.	Risk Area	O/S at previous Milestone resolved?		Deficiency Location	Description of deficiency and any recommendation made for remediation OR Enter Milestone Report Narrative reference no. that deals with this issue.
			Y	N		



Builder Bulletin 19R - Module 4C Milestone Report- Tracking Summary (Append to Narrative Report)

Project Name: _____

Common Element No.: _____

Milestone Report No.: _____

Dated: _____

Milestone reference No.:	Risk Area:
Narrative: (continue into next box if necessary)	
Milestone reference No.:	Risk Area:
Narrative: (continue into next box if necessary)	
Person Completing Narrative Report:	

Builder Bulletin 19R - Module 4D The Final Report

EFFECT OF SUBMISSION

Submission of the Final Report represents notice to Tarion that the project has been properly completed with the possible exception of minor, outstanding deficiencies. FRCs must inform Tarion when the Final Report has been submitted to the vendor/builder.

The Bulletin 19R Final Report follows the submission of all required 60 Day and other Milestone Reports. It must be submitted to Tarion by the vendor/builder at the completion of the project but not before the registration of the condominium corporation. The Bulletin 19R Final Report forms part of the consideration for release of security.

CONTENT

The final report must be a bound copy of the following documents:

- All Milestone Reports associated with the project
- The Condominium Declaration as filed with the Land Titles Office
- All Design Certificates
- Field Review Declaration
- The as-built project drawings, specification, equipment operating manuals, and extended warranty certificates for any building components if any are applicable

(As built drawings, specifications, equipment operating manuals, and extended warranty certificates as above are to be submitted directly to the elected board not Tarion.)

and the following documents as applicable:

- Design Architect's final clearance
- Site Work Engineer's final clearance
- Structural Engineer's final clearance
- Mechanical Engineer's final clearance
- Electrical Engineer's final clearance
- Acoustical Engineer's final clearance
- Occupancy permits - if available

REPORT REVIEW

Tarion will review the Bulletin 19R Final Report within 30 days of receipt and then notify the vendor/builder of any further technical requirements or adjustments to the required security, depending on the extent of any outstanding defects or deficiencies, and any outstanding administrative or non-technical matters. If everything is in order from a technical perspective, the release of security, subject to the requirements in Builder Bulletin 28, will be completed within 45 days of receipt of all the required documentation.

The FRC will assess the likely costs of rectifying outstanding matters based on current sub-trade prices for such rectification and provide them to Tarion. Tarion will then review the costs provided and retain an appropriate amount of the security. The amount retained will reflect the likely cost of rectification in the event that Tarion was required to give effect to any remediation and will also take into account any outstanding administrative and non-technical costs.



Builder Bulletin 19R – Module 4D Field Review Declaration (For use in connection with Bulletin 19R Final Report)

This form must be submitted by the vendor/builder to Tarion’s Condominium Group as part of the Bulletin 19R Final Report (see Module 4D).

Name of Project: _____

Enrolment No.: _____

Project Address: _____

Vendor Builder Name: _____

Vendor/Builder Reference No.: _____

Please complete the following tables. Report references should be derived from the Milestone Report number followed by the item number in that report e.g. if the deficiency is noted in the second Milestone Report and the item number is 374 the annotation would appear as M2/374. Delete any risk areas that are non-applicable.

ITEM	RISK AREAS	DEFICIENCY O/S? (Check box)	IF O/S – REPORT REFERENCES	COST TO CORRECT	INITIAL IF CLEAR
1	BELOW GRADE/ FOUNDATIONS				
1.1	Earth bearing				
1.2	Substructure				
1.3	Drainage systems				
1.4	Damp proofing or waterproofing				
1.5	Insulation				
1.6	Elevator sump pits				
2	STRUCTURE				
2.1	Slabs; decks; beams; columns; walls				
2.2	Expansion joints				

2.3	Window wall ICF insulated concrete forms				
2.4	Slab protection systems; * Parking * Surface				
2.5	Balcony protection systems				
2.5.1	Balcony guards				
3	EXTERIOR CLOSURE				
3.1	Back-up wall; substrate				
3.2	Masonry veneer				
3.2.1	Precast concrete				
3.2.2	Cast-in-place concrete				
3.2.3	Siding (non-decorative)				
3.2.4	Exterior Insulated Finish System (EIFS)				
3.2.5	Load bearing masonry				
3.2.6	Curtain wall				
3.2.7	Other cladding systems				
3.3	Concealed protections				
3.3.1	External sealants				
3.3.2	Soffits				
3.3.3	Architectural coatings; finishes; paint				
3.4	Windows, glazing and exterior doors				
3.4.1	External sealants				
3.5	Thermal insulation				
3.6	Air barrier; vapour retarder				
4	ROOFING				
4.1	Membrane; shingles or sloped metal				
4.2	Insulation; ballast				
4.3	Vapour retarder; air barrier; ventilation				
4.4	Drainage				
4.5	Snow and ice control				
4.6	Safety tie-back anchors for building maintenance				
4.7	Green Roof intensive/extensive				
5	FIRE SAFETY SYSTEMS				
5.1	Containment				

5.2	Egress				
5.3	Suppression				
5.4	Detection and alarm				
5.5	Sound transmission				
6	INTERIOR FINISHES, COMMON AREAS				
6.1	Corridors and stairwells				
6.2	Party/common rooms				
6.3	Sauna/whirlpool/fitness				
6.4	Swimming pool				
7	CONVEYING SYSTEMS (ELEVATORS)				
7.1	Sound transmission				
8	MECHANICAL				
8.1	Heating; ventilation; air conditioning				
8.2	Plumbing –supply				
8.3	Plumbing – drainage				
8.4	Waste disposal				
8.5	Insulation				
8.6	Noise/vibration				
9	ELECTRICAL				
9.1	Distribution systems				
9.2	Lighting				
9.3	Emergency power				
9.4	Intercom and security systems				
9.5	Insulation				
9.6	Noise rating of transformers				
10	SITE WORK				
10.1	Pavements; curbs				
10.2	Retaining walls				
10.3	Landscape structures (gazebos, decks)				
10.4	Fences				
10.5	Irrigation systems				
10.6	Sod, trees and shrubs				
				TOTAL OF ESTIMATED CORRECTION COSTS:	

DECLARATION

I, _____, the undersigned, being authorized in the Province of Ontario to provide professional services by virtue of a Certificate of Authorization (as issued by the Professional Engineers of Ontario) or a Certificate of Practice (as issued by the Ontario Architects Association) hereby declare:

- i. that I have read and understand the requirements of Builder Bulletin 19R and, with reference to the identified risk areas contained in the approved Scope of Work proposal for this project;
- ii. that I have performed field and documentation reviews as required by the Bulletin and the Scope of Work Proposal dated _____;
- iii. I declare that I have sent the necessary reports to both the vendor/builder and the Tarion Warranty Corporation as required and indicated above;
- iv. to the best of my knowledge the condominium project has been constructed in a workmanlike manner, in general conformity with the construction documents, the relevant sections of the governing Ontario Building Code and good construction practice;
- v. that I shall conduct a follow up review to confirm that any/all outstanding issues identified in the final submission have been completed, and signed off and accepted by the FRC and Prime Consultant or if applicable the Condominium Corporation Board of Directors; and
- vi. I am in a position to bind this firm.

FIELD REVIEW CONSULTANT

SIGNATURE

PRINT NAME

ADDRESS

TELEPHONE

PRIME CONSULTANT

SIGNATURE

PRINT NAME

ADDRESS

TELEPHONE



Builder Bulletin 19R – Final Report Notice of Completion

Tarion Warranty Corporation
5160 Yonge Street, 12th Floor
Toronto, ON M2N 6L9

From: _____

Date: _____

Project Name: _____

Project Address: _____

Common Element No.: _____

Vendor/Builder: _____

This letter is to inform Tarion Warranty Corporation that the Final Report for the above name project has been completed according to requirements of Builder Bulletin 19R and was provided to the vendor/builder on _____ (date).

SIGNED

DATED