



THE HONG KONG INSTITUTE OF SURVEYORS

RULES AND GUIDE TO THE ASSESSMENT OF TECHNICAL COMPETENCE BUILDING SURVEYING DIVISION

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1 Objectives

Through the Assessment of Technical Competence (ATC), the Building Surveying Division of the Hong Kong Institute of Surveyors seeks to satisfy itself that only those who are competent in carrying out Building Surveying work at technical level are admitted to technical associate membership of the Institute. This document sets out the key elements and requirements of the ATC.

2 The Assessment of Technical Competence

2.1 The ATC comprises the following elements:

- (a) a minimum period of two years technical training as prescribed in Section 7 (consisting of not less than 400 working days) of an approved nature in Hong Kong, or mainly in Hong Kong, save that exemption may be granted as described in Section 5;
- (b) a minimum of 2.5 hours per 3 full months of Pre-Qualification Structured Learning (PQSL) as prescribed in Section 10 for the non-exempted period of technical training; and
- (c) a final assessment as prescribed in Section 8 consisting of an assessment by written test and an assessment interview.

3 Eligibility

3.1 To enter the ATC the candidate must:

- (a) be a technical trainee or probationer of the Institute (which status shall be continuously maintained by paying the relevant membership subscriptions throughout the ATC period) unless he has been granted the maximum exemption of 21 months permissible under Section 5.1;
- (b) have obtained the academic or vocational qualification as prescribed under Bye-law 2.4.2(a) of the Institute; and
- (c) have undertaken or be undertaking technical training through engagement in one of the following three main stream practice of Building Surveying practice as described in Section 4 under the supervision of a professional or a senior technical member of the Institute or equivalent.

3.2 The benchmark qualification standard is a higher diploma in building surveying.

4 Approved areas of experience and competence standards

4.1 Candidates are required to satisfy the Institute that they have through engagement in their daily work obtained a broadly based and well balanced training experience and achieved the required competence standard under the supervision of a qualified Supervisor, who should be a surveyor, an engineer or architect, or a technical associate of the Institute with 3 years standing, or a technical person of equivalent standard as the

Institute may recognise, and who should not be providing technical training to more than 10 candidates at any one time. The candidate should practise in one of the following three main stream practices:

- (a) Building Control;
- (b) Project Management; or
- (c) Maintenance Management.

1. It is appreciated that candidates for technical trainees may not have identified their preference for main stream practice at the commencement of their training and are often influenced by the employment they initially secured. Nevertheless, during the course of training, candidates should develop their aptitude and specialisation and identify a main stream practice for final assessment.
2. Candidates should acquired under proper supervision, sufficient in-depth technical experience in at least 1 of the first 3 areas of practices together with 2 more areas of practices from the remaining 6 areas of practices:

Area	Competence standard
1. Buildings Ordinance, Allied Legislation, Administrative Law and Related Legal Aspects	<ul style="list-style-type: none"> a) Drafting of proposals to the Building Authority and other authorities. b) Understanding and applying the Buildings Ordinance and allied legislation. c) Application of principles of exemptions and modifications. d) Understanding and applying the requirements on means of escape and fire safety for licensed premises and other buildings. e) Ability to observe, assess and take actions regarding unlawful building works.
2. Project Management	<ul style="list-style-type: none"> a) Perform project management duties in control of time, cost, quality, human resources, communication, risk, scope, integration and procurement. b) Preparation of development proposal/programmes, feasibility studies and budgets. c) Ability to understand and interpret consultants' proposal and users' requirements. d) Application of environmental impact assessment, energy conservation and similar studies made by consultants. e) Co-ordination of the design team, main contractors, subcontractors, suppliers and other stakeholders.
3. Building Maintenance,	<ul style="list-style-type: none"> a) Investigation of building defects, and design and supervision of remedial works.

Structural Survey and Assessment	<p>b) Application of principles of planned maintenance programme and progress monitoring system.</p> <p>c) Application of principles of selection of materials in renovation works.</p> <p>d) Design and implementation of improvement, adaptation, alteration and/or conservation to buildings.</p> <p>e) On site supervision to ensure meeting clients' requirements.</p> <p>f) Structural and condition surveys of buildings, preparation of schedule of defects and reports.</p> <p>g) Assessment of cost of repair and replacement, also for fire insurance purposes.</p>
4. Building Construction, Structures and Demolition	<p>a) Application of principles of feasibilities studies, design proposals, costing and project management.</p> <p>b) Design and preparation of working drawings and detailing of building works.</p> <p>c) Application of principles of structural design and analysis.</p> <p>d) Material selection, evaluation and application of test results.</p> <p>e) Understand and apply the principles of specification.</p> <p>f) Supervision of building works and existing structures for compliance with the Buildings Ordinance, allied legislations and client's requirements.</p> <p>g) Preparation of as-built drawings, measurement and valuation of work.</p> <p>h) Advise and supervision of demolition works.</p> <p>i) Assurance of construction safety including handling of hazardous/chemical wastes.</p> <p>j) Knowledge of and act as relevant Technical Competent Person in Site Supervision Plan where appropriate.</p>
5. Building Economics and Contract Administration	<p>a) Preparation of tender and contract documents.</p> <p>b) Perform tender analysis and prepare tender reports.</p> <p>c) Cost estimating, cost control and measurement of works.</p> <p>d) Project scheduling and resource planning/shuffling.</p> <p>e) Contract administration, valuation, certification and final account procedures.</p>
6. Building	<p>a) Understanding and application of building services</p>

<p>Services</p>	<p>installations and their design considerations.</p> <p>b) Coordination and supervision of building services installations.</p> <p>c) Inspection, testing and commissioning of new and/or existing installation.</p> <p>d) Alteration, adaptation, and improvement of existing installations in conjunction with other trades.</p>
<p>7. Property & Facilities Management</p>	<p>a) Integrate building services, building maintenance, resources management, support services, statutory requirements and other techniques for performing property & facilities management.</p> <p>b) Scrutiny of fitting-out plans; supervision, inspection and monitoring fitting-out work.</p> <p>c) Application of provisions in Building Management Ordinance, Deeds of Mutual Covenant, Landlord & Tenant (Consolidation) Ordinance and other related regulations.</p> <p>d) Application of mechanisms in energy conservation, safety and environmental protection.</p> <p>e) Management of direct labour, contractors, suppliers, services providers and security.</p> <p>f) Perform relevant administrative duties to better serve customers.</p>

5 Exemption from Technical Training Experience

5.1 For candidates who have attained the qualification and technical training prescribed under Bye-law 2.4.2(a), and subject to the training gained during the qualifying period as defined below being of an approved nature, exemption may be granted towards the 2-year technical training of approved nature prescribed under Bye-law 2.4.2(b) at the rate of 3 months per 1 full year (but not part thereof) of qualifying period up to a maximum exemption of 21 months as follows:-

- (a) For candidates who satisfy Bye-law 2.4.2(a)(i) and have completed the academic programme earlier than August 2004, their period of technical training will be the qualifying period;
- (b) For candidates who satisfy Bye-law 2.4.2(a)(ii) and have completed the academic programme earlier than August 1999, their period of technical training in excess of 5 years will be the qualifying period;
- (c) For candidates who satisfy Bye-law 2.4.2(a)(iii) and have completed the academic programme earlier than August 1997, their period of technical training in excess of 7 years will be the qualifying period.

6 Entry to ATC

- 6.1 Candidates applying to undertake the ATC are required to provide details of the proposed training arrangements by completing Form **ATC1/BS** and submit the same, together with documentary proof of their academic or vocational qualification, to the Institute for approval.
- 6.2 Candidates who wish to apply for exemption from part of the technical training experience are required to submit a Summary of Experience in the form as prescribed in Section 9.
- 6.3 The Institute will inform the candidate of the commencement date of the ATC (which will normally be the date when the Form **ATC1/BS** is signed by the candidate's employer) if his/her application is approved, or the reason(s) for rejection if his/her application is not approved.
- 6.4 Candidates applying to undertake the ATC should inform the Institute by using Form ATC1S/BS on any change of employment and/or Supervisor.

7 Record of Technical Training

- 7.1 Candidates for technical trainees are required to record their training experience in a chronological order using the form attached as the Appendix to these Rules and Guide, and to cause such record to be examined and endorsed by their supervisor at least once every 3 months. This record is essential for the assessors to determine whether the experience obtained by the candidate is adequate, properly balanced and up to the required competence standard.
- 7.2 Candidates for technical trainees are required to submit to the Institute their record of training experience together with Form **ATC1/BS** – Interim Submission of ATC Training Record at the end of every 3 months throughout the non-exempted period of technical training except that the Training Record for the month before the Final Assessment, on the understanding that all such records must be submitted before the Final Assessment. Failure to do so may result in deferment of the Final Assessment.

8 Final Assessment

- 8.1 Candidates for technical trainee membership may submit their application for Final Assessment using Form **ATC3/BS** upon completion of their period of technical training together with the following documents:
 - (a) A Summary of Experience as prescribed in Section 9;
 - (b) A Record of PQSL as prescribed in Section 10; and
- 8.2 Candidates who are Probationer members of the Institute (who have taken or have been approved to take the Final Assessment of the Assessment of Professional Competence) may submit their application for ATC Final Assessment using Form **ATC3/BS** upon completion of their professional training period together with the following documents:

- (a) A Summary of Experience of the last 12 months of professional training experience if this has not been submitted for assessment under the Assessment of Professional Competence; and
 - (b) A Record of PQSL as prescribed in Section 10.
- 8.3 Candidates will be informed to attend a written test as prescribed in Section 11 before the invitation to an Assessment Interview as prescribed in Section 12 if the Institute is satisfied with their technical training experience and PQSL. Candidates passing the assessment of Written Test will be required to attend an Assessment Interview as soon as practicable.
- 8.4 In the event that the candidate fails to satisfy the Institute in one or more elements as prescribed in Section 2.1 of the ATC, the arrangements as prescribed in Section 14 will be made.

9 Summary of Experience

- 9.1 The Summary of Experience should be a summary of the candidate's technical training experience in not more than 1500 words. It should set out in a clear and concise manner the technical training experience the candidate has gained during the training period by making reference to the particular work in which the candidate has been involved. It should also include a statement as to the extent and level of the candidate's personal involvement in the work mentioned.
- 9.2 The Summary of Experience must be certified by the candidate's Supervisor before it is submitted to the Institute for assessment.

10 Pre-Qualification Structured Learning (PQSL)

- 10.1 The PQSL aims to complement a candidate's technical training experience during his/her ATC period. Candidates are required to maintain a record of their participation in such activities in order to demonstrate that they used their best endeavours to keep abreast of the updated knowledge and technological changes in their profession.
- 10.2 Structured learning may be in the form of short courses, seminars, or conferences, organised by academic or professional institutions, or special training courses organised by employers.
- 10.3 Structured learning must relate to the training areas and should preferably be complementary to the practical experience that the candidates are acquiring. Study courses that will enhance technical knowledge or professional development will be suitable. Structured self-learning courses may be recognised up to an aggregate of 5 hours. Unstructured self-learning is not recognised. Individual events will only count for maximum of 10 hours unless specifically endorsed by the Institute.
- 10.4 Upon application for final assessment, candidates are required to declare the structured learning they have undertaken and they will be expected to testify their added knowledge at the assessment interview. In case of queries, candidates may be required to produce evidence of their structured learning.

11 Written Test

- 11.1 Through the Written Test, a candidate is expected to demonstrate his/her technical competence in relation to the particular area(s) of Building Surveying practice that he/she has been engaged in.
- 11.2 The Written Test will be in the form of multiple choice and/or short questions on the practical task(s) which the candidate has carried out during the technical training period. In assessing the Written Test, the assessor will be looking for various elements of competence standard as prescribed in Section 4.3.
- 11.3 The language of the Written Test will be English.

12 Assessment Interview

- 12.1 The interview will be conducted by 3 interviewers comprising either three corporate members or two corporate members and one technical member of the Building Surveying Division.
- 12.2 The candidate will be required to answer questions on his/her training experience, PQSL record, technical knowledge on Building Surveying theories, practice and technology, and general knowledge on institutional matters. The interviewers will be looking for the following attributes from the candidate:
 - (a) Adequate technical training experience with emphasis on the selected areas of competence standard as prescribed in Section 4.3;
 - (b) Awareness and application of up-to-date Building Surveying related knowledge and technology; and
 - (c) Ethical standard towards the Building Surveying profession.
- 12.3 The Assessment Interview may be conducted in English and/or Chinese language depending on the candidate's usual spoken language at work.

13 Notification of Results

The final result of the Assessment of Technical Competence will normally be notified 1 month after the Assessment Interview.

14 Arrangements for Unsuccessful Candidates

- 14.1 Candidates who fail to satisfy the Institute in one or more elements of the ATC as prescribed in Section 2.1 may be permitted to re-apply for assessment of the aspects failed.
- 14.2 Candidates who are found to have inadequate technical training experience will be advised to extend the period and scope of their technical training. Normally, the additional time required will not be less than 3 months. Candidates will need to continue to maintain their Record of Technical Training during the extended period and to prepare the corresponding Summary of Experience on completion of that period.
- 14.3 Candidates who fail in their Written Test will be asked to re-sit.

14.4 Candidates who fail in the Assessment Interview will normally be informed of the deficiencies and be permitted to apply for re-interview.

14.5 According to Bye-laws 2.5.2 & 2.5.5, the maximum period during which a person may remain a probationer or technical trainee shall be limited to a total of 8 years, provided always that the General Council shall have the power to vary the period in particular cases.

14.6 Candidates who wish to re-apply for an assessment of unsuccessful element should submit Form ATC3/BS.

15 Appeals

The ATC results as decided by the Institute are not subject to appeal.

16 Lodging of Applications

16.1 The following table summarizes the ATC Forms to be used and the submissions to be made throughout the ATC period:

ATC Form	Description	Event of Lodgement	Accompanied Document
ATC1/BS	Application for Entry to ATC	Anytime on entry.	<ul style="list-style-type: none"> • Proof of academic / vocational qualifications • Summary of Experience (for exemption of experience only)
ATC1S/BS	Supplementary Application for Entry to ATC	<ul style="list-style-type: none"> • Change of Employment or Supervisor • It must be endorsed by former employer, former Supervisor, new Employer and new Supervisor 	
ATC2/BS	Interim Submission of ATC Training Record	Every 3 months after entry to ATC and before Final Assessment.	<ul style="list-style-type: none"> • Record of Training
ATC3/BS	Application for ATC Final Assessment	On completion of the minimum technical training experience required.	<ul style="list-style-type: none"> • Summary of Experience • Record of PQSL
ATC3R/BS	Re-application for ATC Final Assessment	Re-attempt of part of the Final Assessment	<ul style="list-style-type: none"> • Depends on part being re-assessed

16.2 All applications should be delivered to the Institute either personally or by post.

- 16.3 Candidates should check with the Institute if they do not receive any reply after one month of submission.
- 16.4 Late applications may result in delay and timely assessment that may unduly prolong the candidates' pursuit of technical qualification.

17. Notes

- 17.1 The Institute reserves the right to amend the Rules and Guide without prior notice.
- 17.2 All matters or disputes relating to these Rules and Guide is subject to the final decision of the Institute.
- 17.3 This is not a contractual publication.

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Record of Technical Training

Month _____

Date	Description of work carried out	Training Area
Candidate's Name & Signature Date	Supervisor's Name, Qualification & Signature Date	Official Use (HKIS)