

ROLE AND RESPONSIBILITIES OF A SUPERVISOR

1 INTRODUCTION

It is undoubtedly important for a PPE Candidate to have a comprehensive professional practice programme to acquire and reinforce his or her discipline, integrity, judgment, skills, knowledge and quest for learning during his or her internship. It is therefore necessary for the Board of Architects to enlighten the Candidate's Advisor of the PPE Candidate Development Programme, the details of the examination that the PPE Candidate will have to sit and of the Advisor's role and responsibilities in assisting the PPE Candidate to acquire core competencies in the various areas of architectural training and practice.

2 BECOMING A PPE CANDIDATE

If an architectural graduate with a recognised qualification in Architecture wishes to become registered with the Board of Architects, Singapore, he or she must first apply to become a PPE Candidate with the Board. This requirement is also applicable to those graduates with a qualification in Architecture from a non-recognised institution of higher learning but who have passed their Assessment of Eligibility under Section 15 (1)(c).

The architectural graduate must be a PPE Candidate with the Board for a minimum of 24 months up to the date of submission of the PPE Candidate's Log Book and Professional Case Study before he or she will be allowed to sit for the Professional Practice Examination or the Professional Practice Interview Examination. Any period shorter than the minimum of 24 months is subject to the approval of the Board upon the PPE Candidate making an appeal application giving his or her reasons.

Upon being employed, the PPE Candidate is required to submit a letter from his or her employer confirming of his or her employment. As he or she is required under Section 15 (2)(a) and Section 15 (2)(b) of the Architects' Act to have the specified duration of practical experience in Singapore before being eligible to sit for the Professional Practice Examination or the Professional Practice Interview Examination respectively, he or she is advised not to delay his or her submission of the names of his or her Supervisor and Advisor and their standard acknowledgement forms confirming of their willingness to be appointed so as to gain meaningful mentoring from both mentors right from the outset of his or her career. He or she must report in writing to the Board of any change in the appointment of either the Supervisor or the Advisor and this report together with the new standard acknowledgement form endorsed by the new Supervisor or Advisor must be made within one month of the said change.

3 DURATION OF PPE CANDIDATES' PRACTICAL EXPERIENCE

3.1 DURATION REQUIREMENTS

The duration of the practical experience required shall be as follows:

3.1.1 Section 15 (2)(a) of the Architects' Act

PPE Candidates must ensure that they have sufficient practical experience in architectural practice for not less than 24 months consisting of such practical experience in architectural practice in Singapore for a continuous period of at least 12 months under the supervision of a Supervisor who must be a registered architect in the employ of the Government or a registered architect who has in force a practising certificate and an Advisor from the Board of Architects' appointed Panel of Advisors (see Appendix A) but who should not be from the same firm.

3.1.2 Section 15 (2)(b) of the Architects' Act

PPE Candidates must ensure that they have sufficient practical experience in architectural practice for not less than 5 years consisting of such practical experience in architectural practice in Singapore for a continuous period of at least 2 years under the supervision of a Supervisor who must be a registered architect in the employ of the Government or a registered architect who has in force a practising certificate and an Advisor from the Board of Architects' appointed Panel of Advisors (see Appendix A) but who should not be from the same firm. A continuous period of 12 months practical experience must be gained within the 5 years immediately preceding the date of his application for registration for the Professional Practice Interview Examination.

4 PPE CANDIDATE'S PRACTICAL EXPERIENCE

4.1 INTRODUCTION

The Board of Architects is concerned with the quality of the PPE Candidate's practical experience. For a PPE Candidate to achieve a comprehensive practical training in an architectural organisation to achieve some degree of responsibility and competency, the two areas of concern are:

- (a) PPE Candidate's Development Programme.
- (b) Core competencies in the various areas of architectural practice.

4.2 THE PPE CANDIDATE'S DEVELOPMENT PROGRAMME

In the training of a PPE Candidate, he or she must undergo a PPE Candidate's Development Programme in two distinct kinds of activities:

- (a) Awareness, Understanding and Learning Activities.
- (b) Skills and Application Activities.

4.2.1 AWARENESS, UNDERSTANDING AND LEARNING ACTIVITIES

A PPE Candidate needs to acquire basic knowledge/information and would firstly be involved in the awareness, understanding and learning activities which encompass technical information, concepts and principles. These practical experience activities include the following:

- (a) Design and Technical Knowledge which cover the production of the project programme, making feasibility studies with considerations to planning requirements, site and environmental

analysis, economics and market situation, production of schematic designs, design development, production of building drawings, details and measured drawings, understanding of various building and engineering systems to enable the selection and integration into the design including taking into consideration of the mechanical and electrical services, understanding of building cost analysis, knowledge of building codes, codes of practice, Standards' codes and various performance-based regulations and their compliance, and finally, various submission procedures.

- (b) Contract Administration and Project Management which cover the understanding of the purpose of the Conditions of Building Contract and Sub-Contract, and understanding each and every clause, the understanding and usage of the National Productivity and Quality Specification to establish quality assurance, contract documentation, tendering procedure, evaluation of tenders and award of tender, conducting consultants' meetings and site meetings, administration of the building contract and involving in the creation and maintenance of a systematic and comprehensive record of the project.
- (c) Office Administration and Management which involves learning about the various administrative duties and systems of an architect's office, and the administration of the office's resources to support the goals or objectives of the firm.

4.2.2 SKILLS AND APPLICATION ACTIVITIES: CORE COMPETENCIES

A PPE Candidate needs to acquire practical experience whilst learning to apply his or her formal education to the daily realities of architectural practice involving awareness, understanding and learning activities which when successfully accomplished, will result in core competencies in the following areas:

- (a) acquire abilities to make independent site inspection/ investigation, gather information through visual inspection and to gather information through personal interviews to assist in the formulation of the project requirements;
- (b) acquire abilities in using information gathered/researched and data collection to develop the project programming requirements;
- (c) able to collect, organise and evaluate information/data set forth in written and graphic form, the Client's requirements and desires for the project and then, to establish the scope, design, objectives, limitations, criteria and determine the feasibility of the building project;
- (d) able to advise his or her Client on the possibility of a project development and providing him with a coherent, logical and well-designed sketch design taking into consideration all planning constraints, economics, site and environmental considerations and market situation;
- (e) acquire the necessary knowledge and understanding of various building and engineering systems to enable the selection and integration into the design including taking into consideration of the mechanical and electrical services and with subsequent ability to implement and coordinate engineering systems in buildings and to

resolve areas of disagreement or difference of opinion with the engineering consultants;

- (f) acquire knowledge of building codes, codes of practice, Standards' codes and various performance-based regulations and their applications and compliance including the ability to explain to the Client that his or her design has responded reasonably well to the code and regulation issues without unnecessary provisions;
- (g) acquire the ability to check and understand engineering drawings produced by other engineering consultants in relation to the architectural drawings and to be able to adopt the practice of SPRING Singapore CP 83 on CAD layering system and to produce the necessary building drawings and detail drawings;
- (h) acquire understanding of building cost analysis whilst working with the quantity surveyor or cost consultant;
- (i) able to personally take care of the various submission procedures, with the realisation of the various authorities involved.
- (j) acquire practical experience in Contract Administration and able to carry out his/her duties in the following areas:
 - (i) understand the various clauses in the Conditions of Building Contract and able to use the appropriate Conditions of Building Contract and the preparation of a set of specification based upon the National Productivity and Quality Specification (NPQS) format as part of the Contract Documents for a simple project;
 - (ii) would have acquired skill in research and selection of appropriate building materials based on performance criteria and programme requirements whilst preparing the NPQS documents and also acquire communication skill to deal with the consultants and the Client, in the relationship between the drawings and specifications with specific considerations being taken on issues of safety, precautionary measures, house-keeping and environmental matters;
 - (iii) acquire ability in contract documentation by ensuring that the information produced by the various disciplines involved in the design/construction process is properly coordinated within the Contract Documents;
 - (iv) able to handle tendering procedure, evaluation of tenders and award of tender by following appropriate procedures during the tendering process;
 - (v) able to carry out his/her certification duties impartially and with the highest standard of professionalism;
- (k) acquire practical experience in Project Management and able to carry out his/her duties in the following areas:
 - (i) to conduct consultants' meetings and site meetings;
 - (ii) to prepare the minutes of meetings;
 - (iii) in the absence of an appointed Project Manager, able to be the team leader in the team of consultants and to coordinate the communication amongst all parties involved in the project;

- (iv) able to assume his/her duty in ensuring that the respective consultants perform their duties diligently and expeditiously with the required high standard of professionalism;
 - (v) able to evaluate the actual construction works on site for compliance with the Contract Documents including the Contract Drawings;
 - (vi) acquire proper management skill in the handling of the project, for better assurance of the project being completed with better cost control and with problems of delay, cost variations, misunderstandings, wrong interpretation of plans, insufficiency of proper constructional details, being minimised or eliminated.
- (l) acquire experience in Office Administration and Management and able to play his/her part in identifying and articulating the activities required to maintain a successful and healthy architect's office environment.
 - (m) acquire understanding of the basic rights and obligations as well as the knowledge of the application of the Building and Construction Industry Security of Payment Act and the dispute resolution procedure of adjudication.
 - (n) acquire understanding and the knowledge of alternative dispute resolutions such as mediation and arbitration.
 - (o) acquire such other professional competencies that may be considered by the Board to be relevant and necessary.

5 THE PROFESSIONAL PRACTICE EXAMINATION AND THE PROFESSIONAL PRACTICE INTERVIEW EXAMINATION

5.1 OBJECTIVE

The objective of the Professional Practice Examination and the Professional Practice Interview Examination is to ensure that a PPE Candidate has undergone a comprehensive professional practice programme to acquire core competencies in the various areas of architectural training and practice and reinforce his or her discipline, integrity, judgment, skills, knowledge and quest for learning so that after having passed the examination he or she is able to become a registered architect in Singapore and able to exercise his or her professional skills, in addition to carrying his or her duty and responsibilities professionally.

6 THE RECORDING OF PRACTICAL EXPERIENCE

6.1 LOG BOOK

PPE Candidates applying to sit for the Professional Practice Examination or the Professional Practice Interview Examination are required to submit a log book which shall include details of the duration and a description of the practical experience. Reference should be made to the explanatory notes within the Log Book for details on practice and practical experience requirements.

6.1.1 Section 15(2)(a) of the Architects' Act

Log books should adequately cover the range and scope of professional training during the 24-month period. PPE Candidates who log in less than 24 months of practical experience in Singapore are required to submit an overseas log book as proof of his practical experience in another country.

6.1.2 Section 15(2)(b) of the Architects' Act

Log books should adequately cover the range and scope of professional training during the 24-month period in Singapore.

Log books must be endorsed by the Supervisor and Adviser. The Supervisor should be a registered architect in the employ of the government or a registered architect who is holding a valid practising certificate. The Adviser should be from the Board of Architects' appointed Panel of Advisors (see Appendix A) but who should not be from the same firm.

6.2 **PROFESSIONAL CASE STUDY**

PPE Candidates are required to submit a Professional Case Study in such form as required by the Board. The requirements for the submission of a Professional Case Study of a project (carried out in Singapore) within the PPE Candidate's own practical experience at a professional level are outlined in the detailed notes set out below:

6.2.1 **PURPOSE OF THE PROFESSIONAL CASE STUDY**

The purpose of the Professional Case Study is to enable the PPE Candidates to gain experience in terms of an overview of professional practice, to demonstrate ability to investigate a project and to formulate a report on its background from inception to its present state including the ability to assess his experience with a critical thinking approach. To this end, PPE Candidates are expected to identify and form critical conclusions about the problems and success of the project and suggest ways in which problems could have been avoided or reduced and success improved or extended.

6.2.2 **CATEGORIES FOR THE PROFESSIONAL CASE STUDY**

The selected project can be taken from any of the categories set out in Table 1 below. These categories should be taken as a general guide and need not be interpreted too rigidly. The Professional Case Study should preferably be based within these categories on which the PPE Candidate has worked. Where this is not feasible, the Examiners will expect to see a deeper analytical study, critical appraisal and critical conclusion on the subject chosen. The choice of subject must however, be made with the knowledge and agreement of the Employer concerned who should be offered the completed study for reading and comment before its submission. The Employer's signature of approval to the completed Professional Case Study documents must be obtained before submission.

The signature of the Supervisor and Adviser must be endorsed on the first

page of the Professional Case Study.

The Professional Case Study is a document that is intended to be confidential between the PPE Candidate, the Examiners and the Employer and must not be published without permission from the Board.

TABLE 1. SUGGESTED CATEGORIES FOR PROFESSIONAL CASE STUDY	
Category 1:	a completed building
Category 2:	a substantial section of a completed or partially completed complex of buildings. (For example the shopping mall of an office complex or the residential section of, say, a hospital or university).
Category 3:	a partially completed building which should preferably be at least 80% through the estimated contract period.
Category 4:	a compilation of relevant and comprehensive professional experience and competence gained from a collection of projects.

The choice of the project for the Professional Case Study should be discussed with the Advisor once the PPE Candidate has obtained sufficient materials to outline his or her proposal.

6.2.3 SUBMISSION REQUIREMENTS

The dissertation for the Professional Case Study shall consist of 2 parts, namely,

6.2.3.1 **1ST PART:** The length of this 1st Part of the Professional Case Study (excluding Appendices) shall not be less than 2,000 words for PPE Candidates under Section 15(2)(a) and shall not be less than 4,000 words for PPE Candidates under Section 15(2)(b). The PPE Candidate shall document his or her experience in the Professional Case Study providing factual narrative details of interesting situations, problems and dilemmas encountered and their solutions, as follows:

BACKGROUND AND NARRATIVE DETAILS:

This should include information on the following areas of architectural practice where appropriate:

- (a) client's brief - original and final;
- (b) economics - project team's budget estimate and the derivation of the actual contract figure;
- (c) the constitution of the project team including consultants and an analysis of their contributions;
- (d) planning, building regulation and legal history;
- (e) fee structure and office costing; or a reasonable estimate of same;

- (f) feedback system from project to office (including user response and performance studies).
- (g) variations between initial (eg, sketch design) proposals and the final outcome of the project (eg, final design or the completed building);
- (h) successful aspects of the project (eg, periods of a building contract design, including detailing, materials, colour etc). These should be traced back to early decisions and situations. This emphasis on success is an essential complement to any destructive criticism which may arise from hindsight.

It must be understood that the above requirements are not intended to be exhaustive nor would they apply to all subjects for a Professional Case Study. But the range and scope of studies should match suggestions above in the most appropriate manner.

Supporting documents to be included as Appendices to the Professional Case Study may include:

- (a) minutes of meetings (on site, with client and/or of the project team);
- (b) orders or instructions affecting the progress of the project;
- (c) progress charts/programmes;
- (d) an example of monthly financial statements;
- (e) progress photographs;
- (f) drawings which may be relevant - particularly those affecting changes in the economics of the project and its timing against the original programme.

The PPE Candidate should note that Appendices should not be voluminous and should not contain undigested site notes, reports, etc. but must relate directly to the text of the Professional Case Study. Where information of this nature is included it should be cross-referenced (no more than 25 pages in total).

- 6.2.3.2 **2ND PART:** The PPE Candidate must write a Summary Report of a minimum of 4 pages (double spacing) on his or her Critical Thinking Component, as he or she after the minimum of 24 months of involving in the said project, should have gained a certain level of maturity in his or her practice and reflecting back, should be able to see his or her shortcomings. In this Section, he or she through his or her analysis, may for example realise that the project that he or she has chosen may not have given him or her the expected benefit and/or experience that he or she would have wanted, or may realise his or her shortcomings at the end of the 2-year experience and may feel that he or she should have taken a different direction or certain steps or putting more efforts in certain areas, that could have benefited the project. He or she may then record his or her conclusive recommendations after his or her consultations and/or discussions with his or her Supervisor and/or

Advisor. This Critical Thinking Component should cover the following:

- (a) make an analytical study of his or her Professional Case Study and experience;
- (b) make a critical appraisal of his or her experience in the Professional Case Study, and finally,
- (c) in conclusion, he or she must submit his or her recommendations and overviews how he or she could have otherwise chosen or handled the project if given a second chance to do it all over again.

7 SYLLABUS FOR THE PROFESSIONAL PRACTICE EXAMINATION (under Section 15(2)(a) of the Architects' Act)

7.1 WRITTEN PAPER 1 - LAW AND THE ARCHITECT

With the implementation of performance-based practice, a good and thorough understanding and the ability in terms of application of the working and technical knowledge of the various Acts, bye-laws, rules, regulations, limitations, codes of practice, submission/application procedures, Standards' regulations, authorities' controls, appeals/waivers, etc, becomes inevitable. A registered architect is expected to have a duty of care in his or her practice and he or she is expected to give the appropriate advice to his or her Clients and hence, will be able to serve them in the most responsible and professional manner. Unless he or she is made to have a thorough comprehension of all these working and technical knowledge, he or she may not be able to carry out his or her professional duties and responsibilities effectively.

A PPE Candidate will therefore be tested on the knowledge, understanding and application of the following in the context of good architectural practice:

7.1.1 The evolving Architects Act.

7.1.2 The following evolving Singapore Statutes relevant to the Architectural Profession:

- (a) Arbitration Act.
- (b) Boundaries and Survey Maps Act.
- (c) Building and Construction Authority Act.
- (d) Building Control Act.
- (e) Civil Defence Shelter Act.
- (f) Environmental Pollution Control Act.
- (g) Environmental Public Health Act.
- (h) Factories Act.
- (i) Fire Safety Act.
- (j) Foreshores Act.
- (k) Housing Developers (Control and Licensing) Act.

- (l) Land Titles (Strata) Act.
- (m) Land Titles Act.
- (n) Land Transport Authority of Singapore Act.
- (o) National Environment Agency Act.
- (p) National Parks Act.
- (q) Parks and Trees Act.
- (r) Planning Act.
- (s) Sewerage and Drainage Act.
- (t) Singapore Land Authority Act.
- (u) Street Works Act.
- (v) Urban Redevelopment Authority Act.
- (w) Workmen's Compensation Act.

7.1.3 The following evolving Codes, Regulations, Requirements, Guidelines and Handbooks issued by the various Authorities relevant to the Architectural Profession:

- (a) Building and Construction Authority.
- (b) Infocomm Development Authority.
- (c) Jurong Town Corporation.
- (d) Land Transport Authority.
- (e) Ministry of Manpower.
- (f) Ministry of the Environment/National Environment Agency.
- (g) National Parks Board.
- (h) Power Supply.
- (i) PowerGas.
- (j) SPRING Singapore.
- (k) Public Utilities Board.
- (l) Singapore Civil Defence Force (Fire Safety Bureau).
- (m) Urban Redevelopment Authority.

7.1.4 The evolving Planning Act and the various related documents published by the Urban Redevelopment Authority:

- (a) Relevant definitions.
- (b) Rules and regulations, and procedures in respect of applications including outline application.
- (c) Formal application to include change of use of conservation projects and change of use of projects on the site of State Lands, JTC and others.
- (d) Early pre-consultation with relevant departments.
- (e) Simultaneous submission.

- (f) Procedures for cases requiring ADP assessment.
- (g) Appeals.
- (h) The Master Plan 2003, 1980, 1958.
- (i) Amendments to Master Plan 2003.
- (j) Planning Area Boundaries.
- (k) Street Name & their Corresponding Planning Areas.
- (l) Street Block Release and Envelope Control.
- (m) Development Charge and Development Charge Sector Map and Rates.
- (n) Housing Developer Licence Application.
- (o) Conservation Properties.
- (p) Operational Details for New Business, Business-White and Utility Zones.
- (q) Guidelines on Temporary Development Levy.
- (r) Fees Schedule.
- (s) Plan Lodgement Scheme for Additions and Alterations to a Landed House.
- (v) Circulars on Development Control Matters.
- (t) Development Control Handbook Series.
- (u) Exemption List.
- (v) Method to Convert Density to Equivalent Plot Ratio for Residential Developments.
- (w) Landed Housing Area Plan.
- (x) URA Sales of Sites.
- (y) Any other URA rules/guidelines and any other relevant planning rules and regulations.

7.1.5 The evolving Building Control Act and the various related documents published by the Building and Construction Authority:

- (a) Overview of the Building Control Act.
- (b) The functions of the Building Authority.
- (c) The performance-based rules, regulations and building bye-laws.
- (d) Submission procedures and Building Plan Approval.
- (e) Consultation with technical departments and **obtaining** their clearances, and their rules, regulations and bye-laws.
- (f) Application for licenses for show-flat, signboards, name of project, etc.
- (g) Waiver applications.
- (h) TOP application.
- (j) CSC application.
- (k) National Productivity and Quality Specification.

- (l) Code of Barrier-free Accessibility in Building 2002.
- (m) Code of Practice on Buildable Design.
- (n) Good Industry Practices Guides.
- (o) Any other relevant building codes, rules and regulations.

7.1.6 The evolving Building and Construction Industry Security of Payment Act and the Building and Construction Industry Security of Payment Regulations.

7.1.7 Any latest amendments, revisions and editions to any Acts, Standards, Codes, Rules, Regulations, Requirements, Guidelines and Handbooks issued by the various Authorities and bodies will be included for Written Examination Paper 1 of this Professional Practice Examination.

7.2 WRITTEN PAPER 2 - PROFESSIONAL PRACTICE

This paper is basically to test the PPE Candidate's understanding of and his abilities in Contract Administration and Project Management which cover the knowledge/understanding of the various forms of Contract and their complementary forms of Sub-Contract, and in particular, the SIA various Forms of Contract and the Public Sector's various Standard Forms of Contract, Design and Build Contracts, the purpose of the Conditions of Building Contract and the knowledge/understanding/application of each and every clause, the understanding and usage of the National Productivity and Quality Specification (NPQS) to establish quality assurance, contract documentation, tendering procedure, evaluation of tenders and award of tender, conducting consultants' meetings and site meetings, administration of the building contract and involving in the creation and maintenance of a systematic and comprehensive record of the project. He is also expected to know the rules governing the Architect's Professional Conduct & Ethics, and the Architect's Conditions of Appointment and Scale of Professional Charges.

A PPE Candidate will therefore be tested on the knowledge/understanding/application of the following in the context of good architectural practice:

7.2.1 The Architects Rules and the Architects (Professional Conduct & Ethics) Rules.

7.2.2 The following documents published by the Singapore Institute of Architects:

- (a) SIA Arbitration Rules.
- (b) SIA Articles & Conditions of Building Contract (Lump Sum).
- (c) SIA Articles & Conditions of Building Contract (Measurement).
- (d) SIA Minor Works Contract.
- (e) SIA Conditions of Sub-Contract.
- (f) SIA Guidance Notes on SIA Main Contract.
- (g) SIA Guidance Notes on SIA Sub-Contract.

- (h) SIA Conditions of Appointments & Architects' Services & Mode of Payment.
- (i) SIA Code of Professional Conducts & Ethics.
- (j) SIA Competition Rules.
- (k) SIA Scale of Professional Fees & Scope of Work.
- (l) SIA Forms, Certificates and Notices relating to the various SIA Contracts.

7.2.3 Public Sector Standard Conditions of Contract (PSSCOC) for Construction Works including the following:

- (a) List of amendments to PSSCOC for Construction.
- (b) Supplement to PSSCOC for Construction Works.
- (c) PSSCOC for Design & Build.
- (d) List of amendments to PSSCOC for Design & Build.
- (e) Supplement to PSSCOC for Design & Build.
- (f) Standard Conditions of Nominated Sub-Contract.
- (g) List of amendments to Nominated Sub-Contract.
- (h) Supplement to Nominated Sub-Contract.

7.2.4 Building Contract - Pre-Contract Issues:

- (a) Duties, responsibilities, liability and relationship of employer, architect, professional engineer and other consultants in public and private practices.
- (b) Types or Forms of Contract.
- (c) Preparation of Contract Documents with the usage of the National Productivity and Quality Specification (NPQS).
- (d) Tendering procedures.
- (e) Tender analysis/Award of Contract.

7.2.5 Building Contract - Contract Administration Issues:

- (a) Role and responsibilities of an Architect in a Building Contract.
- (b) Duties, responsibilities, liability and relationship of employer, architect, professional engineer, other consultants, contractor, nominated sub-contractors, clerk-of-works in public and private practices.
- (c) Knowledge, understanding and application of the various Conditions of Building Contract and Sub-Contract.
- (d) Architect's power and limitations.
- (e) Contract administration.
- (f) Certification duties.
- (g) Various Certificates and Notices.

- (h) Architect's Directions and Instructions.
- (i) Performance Bond.
- (j) Contract Insurance.
- (k) Variations and managing Variations.
- (l) Extension of Time.
- (m) Delay.
- (n) Liquidated Damages.
- (o) Time at large.
- (p) Partial Re-Occupation.
- (q) Interim Certificates.
- (r) Final Accounts.
- (s) Nominated and Designated Sub-Contracts.
- (t) Knowledge and understanding of the basic rights and obligations as well as the application of the Building and Construction Industry Security of Payment Act and the dispute resolution procedure of adjudication.

7.2.6 Building Contract - Post-Contract Issues:

- (a) Defects Liability Period or Maintenance Period and Warranty Issues.
- (b) Dispute Resolution (Litigation) and Alternative Dispute Resolutions (Arbitration, Mediation and Adjudication).
- (c) Determination, Termination and Suspension of Contract/Project.
- (d) Architect's liabilities.

7.2.7 Design and Build Contract:

- (a) Professionalism as applicable to this form of Contract.
- (b) Role and responsibilities of the Architect to the various parties involved in the project.
- (c) The Architect's quasi-judicial role in a Design and Build Contract and the various dilemmas faced by the Architect when handling issues on delay, Liquidated Damages, quality of workmanship, Directions and Instructions.
- (d) Range of architectural services necessary and required to uphold the integrity of the profession.
- (e) Mode of financial reimbursement in relation to range of services provided.

7.2.8 Project Management during design/drawing production stage, construction stage and post-construction stage:

- (a) Management in terms of adherence to the building programme and critical path.
- (b) Value Management in relation to budget and "best value"

philosophy.

- (c) Project Management without being the Qualified Person (QP) for the project.
- (d) Use of components and materials to improve on buildability.
- (e) Case for using pre-fabricated components in relating to value management and buildability.
- (f) Maintaining buildability in all aspects during design, drafting and detailing, specification and shop-drawing productions.

7.2.9 Related Industries, Forms of Architect's Practices and Office Administration and Management:

- (a) General structure of the building industry and specialised trades concerned with buildings.
- (b) Different forms of Architect's practices, e.g. sole-proprietor, partnership, private limited companies, private companies, design and build practice, and multi-disciplinary practice.
- (c) Knowledge and experience in Office Administration and Management in playing his/her part in identifying and articulating the activities required to maintain a successful and healthy architect's office environment

7.2.10 Any latest amendments, revisions and editions to any Acts, Rules, Regulations, Requirements, Guidelines, Conditions of Contract, Handbooks, relevant Certificates and relevant Documents issued by the various Authorities and bodies will be included for Written Examination Paper 2 of this Professional Practice Examination.

7.3 **ORAL INTERVIEW EXAMINATION**

The Oral Interview Examination is considered to be an ideal method of assessing the PPE Candidate's core competencies in the various areas of professional architectural practice, in addition to the two Written Paper Examination. This interview will be conducted only after the PPE Candidate has passed his or her two Written Examination Papers. The PPE Candidate will be required to attend a minimum half-hour interview conducted in the presence of a minimum of two Examiners, on the following:

7.3.1 **CASE STUDY AND LOG BOOK**

The PPE Candidate will be questioned on his or her Professional Case Study and Log Book where he or she may be asked to enlighten on the extent of his or her involvement in the project and of his or her learning process of the Case Study. The PPE Candidate should also be able to elaborate on the Critical Thinking Component in addition to the clarifications on his or her narrative details of interesting situations, problems and dilemmas encountered and their solutions.

7.3.2 MENTORING PROCESS

The PPE Candidate will be required to brief the Examiners, in what ways have his or her Supervisor and Advisor advised and/or assisted in his or her training and development programme and to what extent has he or she gained from the mentoring process.

7.3.3 PROFESSIONAL PRACTICE, WORKING AND TECHNICAL KNOWLEDGE, CONTRACTS AND CORE COMPETENCIES

With the implementation of performance-based practice, it becomes necessary on a broader aspect to test the PPE Candidate on his or her core competencies in the various areas of professional architectural practice covering the syllabus of both the two Written Paper Examination.

8 SYLLABUS FOR THE PROFESSIONAL PRACTICE INTERVIEW EXAMINATION (under Section 15(2)(b) of the Architects' Act)

The Professional Practice Interview Examination under Section 15(2)(b) serves as a major component of assessment of the PPE Candidate's core competencies in the various areas of architectural practice in the absence of the Written Examination. Thus, the Professional Practice Interview Examination under Section 15(2)(b) will necessarily be more vigorous.

Every PPE Candidate sitting for this examination will be interviewed by a panel of three practising architects serving as Examiners. At the interview, the Examiners will probe the PPE Candidate's knowledge and experience as recorded in the PPE Candidate's Practical Experience Record Book and the Professional Case Study including the PPE Candidate's critical thinking in relation to his or her practical training. The syllabus will also include the syllabus covered by the two Written Papers of the Professional Practice Examination under Section 15(2)(a), namely,

- (a) LAW AND THE ARCHITECT (refer to 7.1), and
- (b) PROFESSIONAL PRACTICE (refer to 7.2).

The PPE Candidate will be expected to make comments on any aspect of working and technical knowledge and professional practice which the Examiners may raise within the context of the syllabus and to show an awareness of current issues on practice and the profession.

9 ROLE AND RESPONSIBILITIES OF THE SUPERVISOR

- (a) The Supervisor is a mentor providing guidance and training to the PPE Candidate's Development Programme in the various areas of architectural practice.
- (b) The Supervisor must provide the PPE Candidate the opportunities to acquire core competencies in the various areas of architectural practice
- (c) The Supervisor must provide training during his or her period of practical experience, in the broad aspects of architectural practice covering design and construction documents, contract administration, project management and any other related activities.
- (d) It is important for the Supervisor to provide the PPE Candidate with tutorial lessons in the areas of contract administration, contract issues and other

areas of professional practice;

- (e) The Supervisor should provide reasonable opportunities to the PPE Candidate to acquire knowledge and experience in professional issues.
- (f) The Supervisor should have periodic discussions/meetings with the PPE Candidate so as to be able to review his or her progress and make assessment of his or her practical training.
- (g) In the course of the mentoring process, the Supervisor must realise the PPE Candidate's shortcomings and provide guidance in the further improvement of his or her training.
- (h) The Supervisor must submit to the Board, the Supervisor's quarterly assessment reports (Appendix A) of the PPE Candidate.
- (i) The Supervisor should allow the PPE Candidate the access to educational opportunities and if necessary, to encourage him or her by paying the fees of the seminars and talks as his or her continuing education for the enrichment of his or her training.
- (j) The Supervisor should confer, if needed with the Advisor of the PPE Candidate.

10 SUBMISSION OF QUARTERLY REPORTS ENDORSED BY THE PPE CANDIDATE'S SUPERVISOR

The PPE Candidate is required to ensure that the quarterly reports (Appendix A) are endorsed by his or her Supervisor indicating the Supervisor's involvement and assessment of the PPE Candidate's practice and that the said quarterly reports are submitted to the Board on a quarterly basis by the following dates: **31 January, 30 April, 31 July** and **31 October**.

The format of the quarterly reports is as shown in Appendix B and each report is to be duly completed by the Supervisor on a quarterly basis. Non-submission of such reports by the PPE Candidate may result in the Board not granting its permission for the PPE Candidate to sit for the Professional Practice Examination or the Professional Practice Interview Examination.

**APPENDIX A
PROFESSIONAL PRACTICE EXAMINATION (PPE)
SUPERVISOR'S QUARTERLY ASSESSMENT OF PPE CANDIDATE**

PPE Candidates's Name : _____

Date of Assessment : _____ Assessment Report No: _____

1.0 Practical Training Record

1.1 Site Investigation Experience

Good
Acceptable
Unacceptable

Comments : _____

1.2 Technical and Working Knowledge/Experience

Good
Acceptable
Unacceptable

Comments : _____

1.3 Tender Stage Experience

Good
Acceptable
Unacceptable

Comments : _____

1.4 Contract Experience

Good
Acceptable
Unacceptable

Comments : _____

1.5 Post – Completion Experience

Good
Acceptable
Unacceptable

Comments : _____

2.0 Range of Projects

<input type="checkbox"/>	Good
<input type="checkbox"/>	Acceptable
<input type="checkbox"/>	Unacceptable

Comments : _____

3.0 Case Study and Critical Thinking Component

<input type="checkbox"/>	Good
<input type="checkbox"/>	Acceptable
<input type="checkbox"/>	Unacceptable

Comments : _____

4.0 Diligence/Attitude of Candidate

<input type="checkbox"/>	Good
<input type="checkbox"/>	Acceptable
<input type="checkbox"/>	Unacceptable

Comments : _____

5.0 Recommendation on Suitability of PPE Candidate to sit for Professional Practice Examination

Comments : _____

6.0 Other Observations

Comments : _____

Supervisor's Name

Supervisor's Signature

INFORMATION ON THE ROLE AND RESPONSIBILITIES OF THE SUPERVISOR AND ADVISOR

(A) ROLE AND RESPONSIBILITIES OF THE SUPERVISOR

- (a) The Supervisor is a mentor providing guidance and training to the PPE Candidate's Development Programme in the various areas of architectural practice.
- (b) The Supervisor must provide the PPE Candidate the opportunities to acquire core competencies in the various areas of architectural practice
- (c) The Supervisor must provide training during his or her period of practical experience, in the broad aspects of architectural practice covering design and construction documents, contract administration, project management and any other related activities.
- (d) It is important for the Supervisor to provide the PPE Candidate with tutorial lessons in the areas of contract administration, contract issues and other areas of professional practice;
- (e) The Supervisor should provide reasonable opportunities to the PPE Candidate to acquire knowledge and experience in professional issues.
- (f) The Supervisor should have periodic discussions/meetings with the PPE Candidate so as to be able to review his or her progress and make assessment of his or her practical training.
- (g) In the course of the mentoring process, the Supervisor must realise the PPE Candidate's shortcomings and provide guidance in the further improvement of his or her training.
- (h) The Supervisor must submit to the Board, the Supervisor's quarterly assessment reports (Appendix A) of the PPE Candidate.
- (i) The Supervisor should allow the PPE Candidate the access to educational opportunities and if necessary, to encourage him or her by paying the fees of the seminars and talks as his or her continuing education for the enrichment of his or her training.
- (j) The Supervisor should confer, if needed with the Advisor of the PPE Candidate.

SUBMISSION OF QUARTERLY REPORTS ENDORSED BY THE PPE CANDIDATE'S SUPERVISOR

The PPE Candidate is required to ensure that the quarterly reports (Appendix A) are endorsed by his or her Supervisor indicating the Supervisor's involvement and assessment of the PPE Candidate's practice and that the said quarterly reports are submitted to the Board on a quarterly basis by the following dates: **31 January, 30 April, 31 July and 31 October**.

The format of the quarterly reports is as shown in Appendix B and each report is to be duly completed by the Supervisor on a quarterly basis. Non-submission of such reports by the PPE Candidate may result in the Board not granting its permission for the PPE Candidate to sit for the Professional Practice Examination or the Professional Practice Interview Examination.

(B) ROLE AND RESPONSIBILITIES OF THE ADVISOR

- (a) The Advisor is a mentor to the PPE Candidate providing additional guidance and training to the PPE Candidate's Development Programme in the various areas of architectural practice.
- (b) The Advisor must be available to the PPE Candidate for advice at all times during his period of practical experience in the broad aspects of architectural practice covering design and construction documents, contract administration, project management and any other related activities.
- (c) It is important for the Advisor to provide the PPE Candidate with tutorial lessons where appropriate, in the areas of contract administration, contract issues and other areas of professional practice.
- (d) The Advisor should have periodic discussions/meetings with the PPE Candidate so as to be able to review his or her progress and make assessment of his or her practical training.

- (e) In the course of the mentoring process, the Advisor must realise the PPE Candidate's shortcomings and provide guidance in the further improvement of his or her training.
- (f) The Advisor must submit to the Board the Advisor's quarterly assessment reports (Appendix B) of the PPE Candidate.
- (g) The Advisor must encourage the PPE Candidate to attend seminars and talks as his or her continuing education for the enrichment of his or her training.
- (h) The Advisor must provide guidance to enhance his or her professional growth.
- (i) The Advisor should confer, if needed with the Supervisor of the PPE Candidate.

SUBMISSION OF QUARTERLY REPORTS ENDORSED BY THE PPE CANDIDATE'S ADVISOR

The PPE Candidate is required to ensure that the quarterly reports (Appendix B) are endorsed by his or her Advisor indicating the Advisor's involvement and assessment of the PPE Candidate's practice and that the said quarterly reports are submitted to the Board on a quarterly basis by the following dates: **31 January, 30 April, 31 July** and **31 October**.

The format of the quarterly reports is as shown in Appendix B and each report is to be duly completed by the Advisor on a quarterly basis. Non-submission of such reports by the PPE Candidate may result in the Board not granting its permission for the PPE Candidate to sit for the Professional Practice Examination or the Professional Practice Interview Examination.