

board of architects
singapore

**PROFESSIONAL PRACTICE EXAMINATION
and
PROFESSIONAL PRACTICE INTERVIEW EXAMINATION
in
ARCHITECTURAL PRACTICE**

**GENERAL REQUIREMENTS AND INFORMATION
for
PPE CANDIDATES**

board of architects singapore
5 Maxwell Road, #01-03 Tower Block, MND Complex, Singapore 069110

**GENERAL REQUIREMENTS AND INFORMATION FOR PPE CANDIDATES APPLYING TO SIT
FOR THE PROFESSIONAL PRACTICE EXAMINATION OR PROFESSIONAL PRACTICE
INTERVIEW EXAMINATION**

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1. THE PROFESSIONAL PRACTICE EXAMINATION AND THE PROFESSIONAL PRACTICE INTERVIEW EXAMINATION

1.1 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, judgement, 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.

1.2 FREQUENCY

1.2.1 THE PROFESSIONAL PRACTICE EXAMINATION UNDER SECTION 15(2)(a)

The Professional Practice Examination under Section 15(2)(a) of the Architects Act is conducted annually by the Board of Architects under Section 6(b) of the Architects Act, and assisted by the Singapore Institute of Architects and the Department of Architecture, School of Design and Environment, National University of Singapore. The syllabus for the assessment of the PPE Candidate's ability in professional practice shall comprise of 2 Written Examination Papers and an Oral Interview Examination to be taken only after the PPE Candidate has passed both Written Examination Papers. The Written Examination is normally held in the month of November and the Oral Interview Examination in January the following year.

Six months prior to the date of the Professional Practice Examination, all PPE Candidates will be informed by the Board of the date set for the coming Professional Practice Examination, together with a standard reply format form to be duly completed and submitted by a certain date to the Board by the PPE Candidate indicating his or her interest in sitting for the said examination, and the submission date which will be 3 months prior to the Professional Practice Examination's date, of both the Log Book and the Professional Case Study.

1.2.2 THE PROFESSIONAL PRACTICE INTERVIEW EXAMINATION UNDER SECTION 15(2)(b)

The Professional Practice Interview Examination under Section 15(2)(b) is conducted twice annually in the month of April and October. For this category, PPE Candidates should check with the Board to ascertain the date of the Professional Practice Interview Examination and the closing date for application.

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. He or she is required to make his or her application together with his or her submission of all relevant documents showing proof of graduation and the paper qualification acquired. 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) of the Architects Act.

A registration fee of S\$100 (Singapore Dollars One Hundred Only) as a down-payment for sitting the Professional Practice Examination or the Professional Practice Interview Examination, must accompany his application of becoming a PPE Candidate.

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 Professional Case Study and the PPE Candidate's Log Book 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 QUALIFICATIONS

3.1 SECTION 15(1)(A), SECTION 15(1)(B) OR SECTION 15(1)(C) OF THE ARCHITECTS ACT

Any person applying to sit for the Professional Practice Examination under Section 15(2)(a) or the Professional Practice Interview Examination under Section 15(2)(b) of the Architects Act must possess any of the qualifications referred to in Section 15(1)(a), Section 15(1)(b) or pass his or her Assessment of Eligibility under Section 15(1)(c) of the Architects Act.

4 PRACTICAL EXPERIENCE DURATION

4.1 DURATION REQUIREMENTS

The duration of practical experience required shall be as follows:

4.1.1 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 who fulfils the criteria for appointment set by the Board.

4.1.2 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 who fulfils the criteria for appointment set by the Board.. 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.

5 PPE CANDIDATE'S PRACTICAL EXPERIENCE

5.1 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 a certain 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.

5.2 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.

5.2.1 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.

5.2.2 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.

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 Advisor. 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 Advisor should fulfil the criteria for appointment set by the Board..

PPE Candidates may wish to typeset the practical experience record sheets. It should be noted that at all times, the format and layout of the log book must be adhered to. Non-compliance will result in the rejection of application.

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 OF 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 Advisor 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

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.

6.2.4 PRESENTATION OF THE PROFESSIONAL CASE STUDY

This dissertation should be typed, **double spaced**, on one side of the paper only. As copies of this dissertation submitted may be retained by the Board, PPE Candidates are advised to make additional copies for themselves. The dissertation should be submitted only on A4-sized format papers which must be securely bound between hard covers by either comb or spine binding or ring binding. Do not interleave the written work with extra sheets of blank card or paper, except for tissues which may be used to protect drawings or photographs. The subject, PPE Candidate's name and date giving month and year should be clearly lettered on the cover.

The completed Professional Case Study must be submitted together with the Practical Experience Record Sheets and Application Form to the Board of Architects' office.

These instruction and guidance notes for the Professional Case Study may be modified from time to time by the Board of Architects. While the Board will endeavour to make known to PPE Candidates of any such modification, PPE Candidates are advised however to check with the Board for the latest status.

7 APPLICATION

7.1 SPECIFIC PRESCRIBED FORM

Any application to sit for the Professional Practice Examination or the Professional Practice Interview Examination must be made under specific prescribed form.

7.2 NO REFUND OF FEE

Once application to sit for the Examination is accepted, there will be no refund of fee even if the PPE Candidate wishes to withdraw from the examination.

All the above requirements must be complied with, failing which the PPE Candidate will not be allowed to sit for the examination.

8 REGULATIONS

8.1 REQUIREMENTS AND GOVERNING RULES

The requirements on practical experience and submission of Log Books and Professional Case Study which PPE Candidates must comply with before being eligible to sit for the Professional Practice Examination or the Professional Practice Interview Examination, are identical to those governing registration under Section 15(1) & Section 15(2) of the Architects Act respectively.

8.2 NO EXEMPTION

There is no exemption from both examinations.

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

9.1 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:

9.1.1 The evolving Architects Act.

9.1.2 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 and Construction Industry Security of Payment Act.
- (e) Building Control Act.
- (f) Civil Defence Shelter Act.
- (g) Contracts (Rights of Third Parties) Act.
- (h) Environmental Pollution Control Act.
- (i) Environmental Public Health Act.
- (j) Evidence Act.
- (k) Fire Safety Act.
- (l) Foreshores Act.
- (m) Housing Developers (Control and Licensing) Act.
- (n) Land Titles (Strata) Act.
- (o) Land Titles Act.
- (p) Land Transport Authority of Singapore Act.
- (q) Limited Liability Partnerships Act.
- (r) National Environment Agency Act.

- (s) National Parks Board Act.
- (t) Parks and Trees Act.
- (u) Planning Act.
- (v) Sewerage and Drainage Act.
- (w) Singapore Land Authority Act.
- (x) Street Works Act.
- (y) Urban Redevelopment Authority Act.
- (z) Workmen's Compensation Act.
- (aa) Workplace Safety and Health Act.

9.1.3 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 & Shelter Department).
- (m) Urban Redevelopment Authority.

9.1.4 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.
- (i) Amendment to Master Plan.

- (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.

9.1.5 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.

- 9.1.6 The evolving Building and Construction Industry Security of Payment Act and the Building and Construction Industry Security of Payment Regulations.
- 9.1.7 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.

This Written Examination Paper 1 will have 4 questions, one of which may be a multi-choice question and the grading shall be 100 marks for Written Examination Paper 1.

9.2 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.

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

- 9.2.1 The Architects Rules and the Architects (Professional Conduct & Ethics) Rules.
- 9.2.2 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 Code of Professional Conducts & Ethics.
 - (i) SIA Competition Rules.
 - (j) SIA Forms, Certificates and Notices relating to the various SIA

Contracts.

9.2.3 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.

9.2.4 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.

9.2.5 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.

9.2.6 Building Contract - Post-Contract Issues:

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

9.2.7 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.

9.2.8 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.

9.2.9 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.

9.2.10 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.

This Written Examination Paper 2 will have 4 questions, one of which may be a multi-choice question and the grading shall be 100 marks for Written Examination Paper 2.

9.3 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 three Examiners, on the following:

9.3.1 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.

9.3.2 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.

9.3.3 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.

The grading of this Oral Interview Examination will carry 100 marks to be apportioned as follows (BOA Examiners may decide on a different apportionment of grades on a case by case basis):

- (a) Case Study: 30 marks.
- (b) Mentoring Process: 20 marks.
- (c) Professional Practice, Working and Technical Knowledge, Contracts and Core Competencies: 50 marks.

9.4 REFERENCE MATERIALS

PPE Candidates are only allowed to bring along relevant published reference materials into the examination room.

10 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) is necessarily 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 9.1), and
- (b) PROFESSIONAL PRACTICE (refer to 9.2).

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.

11 PUBLICATIONS/MATERIALS FOR AWARENESS, INFORMATION AND REFERENCE

The following is a list of publications that may be relevant to the architectural profession and they serve to allow the PPE Candidate to be in awareness of such documents and to acquire information which are essential for an architect to provide the right kind of advice at the right time and hence, serve the clients in the most responsible and

professional manner. He or she should also watch out for relevant articles in architectural and building magazines or journals and other publications that would provide up-to-date knowledge on issues related to the architectural profession, especially those on professional practice matters. The PPE Candidate is advised to consult his or her Supervisor and Advisor on the appropriate reading and reference materials.

11.1 OTHER SINGAPORE STATUTES THAT MAY BE RELEVANT TO THE ARCHITECTURAL PROFESSION

These publications are available online at http://statutes.agc.gov.sg/act_head.html. The PPE Candidate should always take note of any available subsidiary legislation which has an impact on practice matters.

- Air Navigation Act.
- Appraisers and House Agents Act.
- Buildings and Common Property (Maintenance and Management) Act.
- Building Maintenance and Strata Management Act 2004.
- Business Registration Act (Chapter 32).
- Civil Aviation Authority of Singapore Act.
- Competition Act.
- Copyright Act.
- Electricity Act.
- Fees Act.
- Frustrated Contracts Act.
- Government Contracts Act.
- Government Procurement Act.
- Housing Developers (Control and Licensing Act).
- Housing and Development Act.
- Health Promotion Board Act.
- Health Sciences Authority Act.
- Homes for the Aged Act.
- Hotels Act.
- HUDC Housing Estates Act.
- Info-Communications Development Authority of Singapore Act.
- Insurance Act.
- International Arbitration Act.
- Judicial Proceedings (Regulation of Reports) Act.
- Jurong Town Corporation Act.
- Land Acquisition Act.
- Land Surveyors Act.
- Maritime and Port Authority of Singapore Act.

- National Emblems (Control of Display) Act.
- Official Secrets Act.
- Parking Places Act.
- Plant Varieties Protection Act 2004.
- Preservation of Monuments Act.
- Prevention of Pollution of the Sea Act.
- Professional Engineers Act.
- Property Tax Act.
- Property Tax (Surcharge) Act.
- Protected Areas and Protected Places Act.
- Public Entertainments and Meetings Act.
- Public Utilities Act.
- Residential Property Act.
- Registered Designs Act.
- Sale of Commercial Properties Act.
- Sand and Granite Quarries Act.
- Sentosa Development Corporation Act.
- Service Lands Act.
- Singapore Examinations and Assessment Board Act 2003.
- Skills Development Levy Act.
- Small Claims Tribunals Act.
- Smoking (Prohibition in Certain Places) Act.
- Standards, Productivity and Innovation Board Act.
- State Lands Act.
- State Lands Encroachments Act.
- Statutory Bodies and Government Companies (Protection of Secrecy) Act.
- Telecommunications Act.
- Town Councils Act.

11.2 REFERENCE BOOKS

A Client's Guide to Engaging an Architect	RIBA – RIBA Publications Ltd
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A Guide to the Indemnity and Insurance Aspects of Building Contracts	Peter Madge – RIBA Publications Ltd
A J Legal Handbook	Specialist & Stage
About Time: Delay Analysis in Construction	Stephen Lowsley & Christopher Linnett – RICS
ADR: Principles and Practice	Henry Brown & Arthur Marriott – Thomson Sweet & Maxwell
Annotated Guide to the Building and Construction Industry Security of Payment Act 2004	Wong Partnership – Thomson Sweet & Maxwell
Arbitration Forms and Precedents	Professor Robert Merkin & Julian Critchlow – LLP Professional Publishing
Arbitration in Asia	Michael J Moser – Butterworths Asia
Arbitration Law	Professor Robert Merkin – LLP Professional Publishing
Arbitration Practice and Procedure: Interlocutory and Hearing Problems	Professor D Mark Cato – LLP Professional Publishing
Arbitration Practice in Construction Contracts	Stephenson, D – Blackwell Publishing
Arbitration: Principles and Practice	John Parris – Blackwell Science (UK)
Architectural Practice & Procedure	John Hamilton Turner, Reginald James Maynard Batsford – Rag Book
Architectural Practice & Procedure	Philip H P Bennett – Batsford
Architectural Practice & Procedure: A manual for practitioners & students	Hamilton Hall Turner – Batsford
Architects and the Law in Singapore	Christopher Chuah, Susana Lim & Tan Beng Kiang – Butterworths Asia
Architect's Essentials of Contract Negotiation (The Architect's Essentials of Professional Practice)	Ava J. Abramowitz – Wiley

Architect's Essentials of Cost Management (The Architect's Essentials of Professional Practice)	Michael D. Dell'Isola – Wiley
Architect's Essentials of Marketing (The Architect's Essentials of Professional Practice)	David Koren – Wiley
Architect's Essentials of Presentation Skills (The Architect's Essentials of Professional Practice)	David Greusel – Wiley
Architect's Essentials of Starting a Design Firm (The Architect's Essentials of Professional Practice)	Peter Piven & Bradford Perkins – Wiley
Architect's Essentials of Winning Proposals (The Architect's Essentials of Professional Practice)	Frank A. Stasiowski – Wiley
Architect's Guide to Adjudication	Lupton – RIBA Publications Ltd
Architect's Guide to Running a Job	Ronald Green – Architectural Press
Architect's Handbook of Construction Project Management	Michael Murray & David Langford – RIBA Publications Ltd
Architect's Handbook of Practice Management	Sarah Lupton – RIBA Publications Ltd
Architects Job Book	Sarah Lupton – RIBA Publications Ltd
Architect's Legal Handbook: The Law for Architects	Anthony Speaight – Architectural Press
Architect's Pocket Book	Charlotte Baden-Powell – Architectural Press
Architect's Professional Practice Manual	James R. Franklin – McGraw-Hill Professional
Architectural Management In Practice	Stephen Emmitt – Longman
Balmann's An Outline of Law	Major J – Law Book Company
Bernstein's Handbook of Arbitration and Dispute Resolution Practice	John Tackaberry & Arthur Marriott – Thomson Sweet & Maxwell

Buildability: Successful Construction from Concept to Completion	Trevor M. Holroyd – Thomas Telford
Building Care	Brian Wood – Blackwell Publishing
Building Contract Claims	Vincent Powell-Smith, John Sims & David Chappell – Blackwell Science (UK)
Building Contract Claims and Disputes (Chartered Institute of Building Professional Series)	Dennis F Turner – Longman
Building Contract Dictionary	David Chappell, Derek Marshall, Vincent Powell-Smith & Simon Cavender – Blackwell Scientific Publications Ltd
Building Contract Disputes: Practice and Precedents	Fenwick-Elliott, R – Sweet & Maxwell
Building Contract Law in Singapore	Lee Peng Khoo, Edwin – Acumen Publishing Co Pte Ltd
Building Contract Litigation	Fenwick-Elliott, R – Sweet & Maxwell Ltd
Building Law Monthly	Published by LLP Professional Publishing
Building Law Reports	Published by LLP Professional Publishing
Building Sub-contract Documentation	David Chappell – Blackwell Science Ltd
Butterworths Construction Law Manual	Redmond-Cooper, R – Butterworths
Case Studies in Post-Construction Liability and Insurance	Anthony P Lavers – published by Post Construction Liability Commission of the International Council for Building Research Studies and Documentation
Casebook on Insolvency and the Construction Industry	Philip Chan Chuen Fye – Sweet & Maxwell
Causation and Delay in Construction Disputes	Nicholas J Carnell – Blackwell Science (UK)

Cheshire, Fifoot and Furmston's Law of Contract	Michael Furmston – Butterworths Law
Chitty on Contracts Volumes 1 & 2 Chitty on Contracts: 2nd Supplement to the 28th Edition Chitty on Contracts: 3rd Supplement to the 28th Edition	Hugh Beale – Sweet & Maxwell Ltd
Code of Practice for Project Management For Construction and Development	Chartered Institute of Building, UK – Blackwell Science
Commonwealth Construction Cases: The Singapore Perspective	Philip Chan Chuen Fye – Sweet & Maxwell, Asia
Communications in the Building Industry	Higgins & Jessop – Tavistock
Company Law and Partnership Law in Selected Asian Countries: China, Hong Kong, Indonesia, Japan, Korea, Malaysia, Singapore	Christian Salbaing – Business Organisations Committee of the IBA Section on Business Law, 1986
Compulsory Land Acquisition: Singapore and Malaysia	N Khublall – Butterworths Asia
Construction Adjudication	John L Riches & Christopher Dancaster – LLP Professional Publishing
Construction Arbitrations	Vincent Powell-Smith, John Sims & Chris Dancaster – Blackwell Science Ltd
Construction Arbitrations - A Practical Guide	Vincent Powell-Smith – Legal Studies & Services Ltd
Construction Claims: Current Practice and Case Management	Jeremy Hackett – LLP Professional Publishing
Construction Contract Claims	RW Thomas – Palgrave, formerly Macmillan Press
Construction Companion to Extensions of Time	Gillian Birkby & Paul Brough – RIBA Publications Ltd
Construction Contract Claims	RW Thomas – Palgrave, formerly Macmillan Press

Construction Contracts	John Murdoch & Will Hughes – Spon Press
Construction Contracts	M P Furmston – Blackwell Publishing
Construction Defects: Your Rights and Remedies	Monica Neo – Sweet & Maxwell Asia
Construction Industry Law Letter	Published by LLP Professional Publishing
Construction Law Casebook: Volumes 1 & 2	Philip Chan Chuen Fye and Chow Kok Fong – Butterworths Asia: Lexis Nexis
Construction Law in Singapore and Malaysia	Anthony P Lavers, George K H Tan, Nigel M Robinson and Raymond Chan – Butterworths Asia
Construction Law: Law and Practice relating to the Construction Industry	John Uff – Sweet & Maxwell
Construction Management: New Directions	Denny McGeorge and Angela Palmer – Blackwell Science
Construction Safety Handbook	VJ Davies and K Tomasin – Thomas Telford
Construction Specification Writing: Principles and Procedures	Harold J. Rosen & John Regener – Blackwell Science
Contract Administration: Guide to the Singapore Standard Form of Building Contract	Eugenie Lip, Sundaresh Menon, Choy Chee Yean & Graham Lim – LexisNexis
Contractual Correspondence for Architects and Project Managers	David Chappell – Blackwell Publishing
Cost Studies of Buildings	Allan Ashworth – Longman
Delay and Disruption in Construction Contracts	Keith Pickavance – LLP Professional Publishing
Design and Build: Uses and Abuses	Jeremy Hackett – LLP Professional Publishing
Design Liability in the Construction Industry	D L Cornes – Blackwell Science (UK)

Development Control and Planning Law Singapore	N Khublall and Belinda Yuen – Longman
Dispute Resolution and Conflict Management in Construction	Edward Davies, Peter Fenn & Michael O'Shea – Spon Press
Dispute Resolution in the Construction Industry	Nicholas Gould – Thomas Telford Ltd
Disputes without Tears: Alternative Methods of Dispute Resolution	John Burkett – RIBA Publications Ltd
Emden's Construction Law	Consultant Editor: His Honour Judge Humphrey Lloyd, QC, MA, LLB (Dub); General Editor: Andrew Bartlett, QC – Butterworths Law
Essentials of Project Management	Dennis Lock – Gower
Evaluating Contract Claims	R Peter Davison – Blackwell Publishing
Expert Determination	John Kendall – Sweet & Maxwell
Extensions of Time Explained	Gillian Birkby – RIBA Publications Ltd
Focus on Construction Contract Formation	Peter Aeberli – RIBA Publications Ltd
Force Majeure and Frustration of Contract	Ewan McKendrick – LLP Professional Publishing
Good Practice Guide: Keeping out of Trouble	Owen Luder – RIBA Publications Ltd
Guide to Quality Management & ISO 9000 Certification (property firms)	CIDB and Real Estate Developers' Association of Singapore
Guide to Sound Practice: RIBA Enterprises Small Practices Series	Stanley Cox – RIBA Publications Ltd
Guide to Successful Client Relationships: RIBA Publications Small Practices Series	Sue Carmichael – RIBA Publications Ltd
Guide to Working with Consultants: RIBA Publications Small Practices Series	Neil Parkyn – RIBA Publications Ltd

Halsbury's Laws of Singapore, Volume 2, Arbitration and Building & Construction	Butterworths Asia, Singapore
Handbook of Sustainable Building: an Environmental Preference Method for Selection of Materials for Use in Construction and Refurbishment	David Anink, Chiel Boonstra, and John Mak – James & James
Hudson's Building and Engineering Contracts Hudson's Building and Engineering Contracts: 1st Supplement to the 11th Edition	Ian Duncan Wallace – Sweet & Maxwell Ltd
In Practice	Paul Hyett – Emap Construct
Introduction to Arbitration	Harold Crowter – LLP Professional Publishing
Keating on Building Contracts Keating on Building Contracts: 1st Supplement to the 7th Edition	Vivian Ramsay and Stephen Furst – Sweet and Maxwell
Law and Practice for Architects	Robert Greenstreet – Elsevier
Law and Practice of Building Contracts	Donald Keating – Thomson Sweet and Maxwell
Law and Practice of Construction Contracts	Chow Kok Fong – Thomson Sweet & Maxwell Asia
Law, Practice and Procedure of Arbitration	Sundra Rajoo – Lexis Nexis
Legal and Contractual Procedures for Architects	David Chappell – Butterworth-Heinemann
Managing AutoCAD in the Design Firm: A Manual for Architects and Interior Designers	Karen A. Vagts – Addison-Wesley Pub. Co
Management for the small design firm: handling your practice, personnel, finances, and projects	Jim Morgan – Whitney Library of Design, New York c1998
Managing International Operations: a Guide for Engineers, Architects, and Construction Managers	Roosbeh Kangari and Chester L Lucas – ASCE Press

Managing Risk In Construction Projects	Nigel J. Smith, Tony Merna, Paul Jobling – Blackwell Science
Marketing and Communication for Architects	Edgar Haupt & Manuel Kubitza – Birkhauser
Mediation – Principles Process Practice (Singapore Edition)	Laurence Boulle & Teh Hwee Hwee – Butterworths Asia
Modern Architecture Through Case Studies	Peter Blundell Jones – Architectural Press
One Hundred Contractual Problems and Their Solutions	Roger Knowles – Blackwell Science (UK)
Parris's Standard Form of Building Contract	David Chappell – Blackwell Publishing
Partnership Law In Singapore	Yeo Hwee Ying – LexisNexis – Butterworths Asia
Personnel Administration	Pigors Meyers - McGraw-Hill
Powell-Smith and Furmston's Building Contract Casebook	Vincent Powell-Smith & Michael Furmston – Blackwell Science (UK)
Principles of Construction Safety	Alan St John Holt – Blackwell Science
Principles of Singapore Land Law	Tan Sook Yee – Butterworths Asia
Professional Indemnity Insurance Explained	Frances A Paterson – RIBA Publications Ltd
Professional Liability of Architects and Engineers	Harrison Streeter – John Wiley & Sons
Professional Negligence	Ashley Underwood - Stephen Holt
Professional Negligence in the Construction Industry	Jeffrey Brown, Ian Yule, Mark Arrand – LLP Professional Publishing
Professional Practice 101: a Compendium of Business and Management Strategies in Architecture	Andrew Pressman – John Wiley & Sons

Professional Practice 101: Business Strategies and Case Studies in Architecture	Andrew Pressman – John Wiley & Sons
Project Management in Construction	Anthony Walker – Blackwell Publishing
Project Planning, Scheduling, and Control in Construction: an Encyclopaedia of Terms and Applications	Published by John Wiley & Sons
Public Private Partnerships - Managing Risk and Opportunities	Akintoye A Beck M – Blackwell Publishing
Public Sector Standard Conditions of Contract for Construction Works 1999: A Commentary	Philip Chan Chuen Fye & Christopher Leong Hoe Yuen – LexisNexis
Public Sector Standard Conditions of Contract for Design and Build: A Commentary	Drew & Napier LLC & KPK Quantity Surveyors – Butterworths Asia
Quantifying and Managing Disruption Claims	Hamish Lal – Thomas Telford
Quantity Surveying	C Dent – Oxford University Press
Report Writing for Architects and Project Managers	David Chappell – Blackwell Publishing
Resolving Disputes by Arbitration: What You Need To Know	Catherine Tay Swee Kian – Singapore University Press
Rimmer's The Law relating to the Architect	William H Gill – Stevens & Sons
Russell on Arbitration	David St John Sutton & Judith Gill – Thomson Sweet & Maxwell
Safety Management In the Construction Industry: A Manual For Project Managers	Published by a team of Experts in India
Security of Payments and Construction Adjudication	Chow Kok Fong – Lexis Nexis
Site Safety	S C Bielby – Construction Industry Research and Information Association
Singapore Arbitration Handbook	Leslie K H Chew – Lexis Nexis

Singapore Building Control Handbook - 2003 Building Control Act (Cap 29)	Commentary by Dr Anne Magdaline Netto, Choy Kah Kin & Prof Lam Khee Poh – LexisNexis
Specifications	J Willis – Crosby-Lockwood
Standard Form of Sub-Contracts: An Annotation	Christopher Chuah, Tan Liam Beng, Michael Chia – Butterworths Asia
Standard Letters in Architectural Practice	David Chappell – Blackwell Publishing
Strata Living in Singapore: A General Guide	Building and Construction Authority, Singapore
Strata Title in Singapore and Malaysia	Teo Keang Sood – Butterworths Asia
The Architect in Dispute Resolution	RIBA Publications Ltd
The Architect in Practice	J Willis – Crosby-Lockwood
The Architect in Practice	David Chappell & Andrew Willis – Blackwell Science
The Architect's Guide to running a Job	R Green – Architectural Press
The Architect's Guide to Running a Practice	David Littlefield – Elsevier
The Architect's Guide to Site Management	R Green – Architectural Press
The Architect's Handbook	Quentin Pickard – Blackwell Publishing
The Architect's Handbook of Professional Practice : Update 2003	The American Institute of Architects (Editor), Joseph A. Demkin (Editor) – Wiley
The Architect's Plan of Work	Roland Phillips – RIBA Publications Ltd
The Business of Architectural Practice	Derek Sharp – Oxford: BSP Professional Books

The Digital Architect: a Common-Sense Guide to using Computer Technology in Design Practice	Ken Sanders – John Wiley & Sons
The Expert in Litigation and Arbitration	Professor D Mark Cato – LLP Professional Publishing
The Expert Witness	Jean Graham Hall & Gordon D Smith – Barry Rose
The Expert Witness in Construction Disputes	Michael P Reynolds – Blackwell Publishing
The Singapore Standard Form of Building Contract: an Annotation	Chan Tan & Partners & Davis Langdon Seah Singapore Pte Ltd – Butterworths Asia
The Survival Guide to Architectural Internship and Career Development	Grace H Kim – Wiley
The Theory and Practice of Mediation	Lim Lan Yuan – FT Law and Tax Asia Pacific
Time Management for Architects and Designers	Thorbjoern Mann – W W Norton
Value and Risk Management: A Guide to Best Practice	Michael F Dallas – published on behalf of the Chartered Institute of Building, UK by Blackwell Publishing
Well Built? A Forensic Approach to the Prevention, Diagnosis and Cure of Building Defects	Robert Evans – RIBA Publications Ltd
What is Dispute Resolution?	Peter L d'Ambrumenil – LLP Professional Publishing

11.3 REFERENCE INTERNET ARTICLES

11.3.1 It is of utmost importance that architects and PPE Candidates are aware of Singapore law. Singapore law, which has its roots in English law, has now evolved into a distinctive jurisprudence. It continues to absorb and modify the common law as well as best practices from other mature legal systems. Developments in Singapore law reflect an acute awareness of the need to recognize and accommodate current international business and commercial practices.

The legal system in Singapore has received numerous international accolades for its efficiency and integrity. As a consequence of this, there is now wide recognition of Singapore as a leading legal hub in Asia.

The website of SingaporeLaw makes available authoritative commentaries on the essential principles of Singapore law. The various articles are available free online at <http://www.singaporelaw.sg/> and are recommended for reading and reference by PPE Candidates.

- 11.3.2 The various articles in the publications and newsletters issued by the Society of Construction Law (Singapore) for the benefit of the public and the construction industry, are available free online at <http://www.scl.org.sg>. They are also recommended for reading and reference by PPE Candidates.

11.3.3 Alternative Dispute Resolutions

- What is ADR or Alternative Dispute Resolution procedures?
- What is Arbitration?
- What is Adjudication?
- What is Mediation?
- What is Med-Arb?

The explanations can be found on the website of the Singapore Institute of Arbitrators (ADR):

<http://www.siarb.org.sg/>. The information is recommended for reading and reference by PPE Candidates.

- 11.3.4 There are various articles/information in the Singapore Institute of Architects' website: <http://www.sia.org.sg/new/>. PPE Candidates should refer to them for information relating to the various areas of architectural practice.

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.