

# ACCREDITED CHECKERS

## FREQUENTLY ASKED QUESTIONS

### Accredited Checkers and Qualification for Registration

**Q1 Why are Accredited Checkers introduced?**

A The need for checking and checkers have long been recognised. The 1974 Street, Drainage and Building Act has already provision under Section 70B for ‘review’ by a second qualified person where the local authority reasonably suspects that defects in the structure of a building under erection may result in failure.

The introduction of Accredited Checkers in the amended Registration of Engineers Act of 2002 is to reinforce the need for public safety in tandem with the rapid advancement in engineering – especially after the collapse of Block 1 of Highland Towers. The Accredited Checkers only cover two areas, namely Structural (e.g. high rise buildings but exclude bridges) and Geotechnical (e.g. mainly slopes and retaining walls). The Accredited Checkers scope of works are on checking of the Permanent Works designed by the Submitting Person (Professional Engineer with Practicing Certificate, PEPC)

**Q2 What is the role of an Accredited Checker?**

A It is to check, with specialised knowledge, all aspects of designed Permanent Works by another Professional Engineer with Practicing Certificate (PEPC) (e.g. Submitting Person of the Project) submitted to him for checking with particular reference to the safety of the Permanent Works. Therefore, the AC will have to first receive the design of the Permanent Works (which include analyses, design, drawings and specifications) from the PEPC (Submitting Person) then only the AC can carry out the checking. AC shall also highlight any missing or inadequacy in Permanent Works design to the PEPC (Submitting Person) for him to reconsider in delivering the final design. The AC scope of works does not include checking on Temporary Works during construction.

<http://www.bem.org.my/circulars/reviewchecking.pdf>

**Q3 When was the registration of Accredited Checker introduced?**

A “Accredited Checker” was introduced in the amended Registration of Engineers Act of 2002. “ [Guideline for Checking / Reviewing the Work Of Another Engineer](#)” was issued on 12 April 2003 through BEM Circular No. 1/2003, updating a similar earlier BEM Circular No. 3/2001.

**Q4 Who can apply for registration as an Accredited Checker? Is it open to general practitioners or confined to specialists?**

A Registration is open to all Professional Engineers with at least 10 years’ experience, who:

- by virtue of his ability and standing in the profession, or specialised knowledge in civil, structural or geotechnical engineering, is adjudged to be deserving of such registration,
- has been engaged in structural or geotechnical design as a Professional Engineer for a period of seven years immediately preceding the date of his application,
- has had continuous relevant practical experience in Malaysia in the year immediately prior to his application.
- has attended and passed the interview conducted by the Accredited Checkers Committee. (BEM/RD/AC/01)

**Q5 Is registration of Accredited Checkers for individuals only.**

A Yes, it is currently for individuals only who are Professional Engineers with Practicing Certificate only.

**Q6 What are the fees for accreditation?**

A A processing fee of RM 50.00.

A registration fee of RM 200.00.

An annual renewal fee of RM 200.00 for those below 60 years old, and RM100.00 for those above 60.

**Q7 Will overseas experience be considered for registration?**

A Yes, provided that the applicant has had continuous relevant practical experience in Malaysia in the year immediately prior to his application. (see Q4)

**Q8 Can a Professional Engineer be registered as a checker in both structural and geotechnical engineering?**

A Yes.

**Q9 Registration is currently confined to the Civils, Structural and Geotechnicals. How about the Electricals and Mechanicals?**

A Yes, registration is currently confined to PEPC registered in the category of Civil; Structural and Geotechnical only.

The emphasis for AC Structural is on the structural safety of buildings especially high rise buildings (but exclude bridges). The emphasis for AC Geotechnical is on safety of slopes and retaining structures.

**[The Role of Accredited Checker](#)**

**Q10 What are the areas for and scope of work in checking?**

A For the time being, checking is confined to the safety of buildings as envisaged in the Government's concern for public safety, in the Uniform Building By-Laws and in the Street, Drainage and Building Act 1974. By default, the scope of checking is confined to the design of Permanent Works only and excludes the Temporary Works during construction.

The areas and scope given in [BEM Circular No. 1/2003](#) are what is considered good practice on what should be checked and the scope of checking. [BEM/RD/AC/02](#) gives guidelines on structural works and [BEM/RD/AC/03](#) on geotechnical works.

As the area and scope of checking are wide and extensive, the matters to be checked should be carefully specified in the terms of reference of the assignment. Checks are to be carried out independently of the First Engineer's work, and the Accredited Checker should include in his report his observations and/or suggestions for amendments and/or alternative solutions on designs consistent with his terms of reference and applicable standards, codes, and local by-laws and regulations.

**Q11 What are the responsibilities of an Accredited Checker?**

A An Accredited Checker shall take full responsibility for the integrity, thoroughness and competence of his report and recommendations. (See also Q12 and Q13) (BEM Circular No 1/2003)

**Q12 Is an Accredited Checker responsible for failure arising from his recommendations?**

A It depends on who incorporates and endorses the Accredited Checker's concepts, recommendations, designs, drawings or observations into the works and submits them for approval. Whoever does this must be deemed to have satisfied himself of their soundness, and hence bear full responsibility for them (See also Q11 and Q13)

The person who does this would normally be the First Engineer, but it could be the Accredited Checker himself, or any other Professional Engineer for that matter. (BEM Circular No 1/2003)

**Q13 What are the liabilities of an Accredited Checker?**

**A** Liabilities are implied when an engineer is engaged to undertake a checking assignment. These will be in contract to his client, and in tort to any employer of that client or other third party. It is of paramount importance that an Accredited Checker knows that he is taking on these liabilities when he undertakes a checking assignment. (See also Q11 and Q12) (BEM Circular No 1/2003)

**Q14 What about Professional Indemnity Insurance?**

**A** BEM Circular No 1/2003 stresses that:  
(i) it is of paramount importance that an Accredited Checker realises that when an engineer is engaged to undertake a checking assignment, liabilities are implied. These will be in contract to his client, and in tort to any employer of that client or other third party, and  
(ii) in his own interest he should have adequate professional indemnity insurance cover for undertaking the work.

**Q15 Should his recommendations not be treated as a ‘second opinion’ and that he should not to be held responsible or liable for them?**

**A** Yes, his recommendations are ‘second opinions’, but as those are given as an Accredited Checker, they go beyond mere ‘second opinions’ to ‘second opinions’ carrying responsibilities and liabilities.  
(See also Q11, Q12 and Q13)

**Q16 With regard to the Circular on the danger of leaving it to Subsurface Investigation Contractors to decide and carry out site investigation, are Site Investigation Contractors to be accredited?**

**A** No. Site Investigation Contractors will not be accredited as they are outside the purview of the Engineers Act; hence the Board issued the Circular to alert Professional Engineers carrying out subsurface investigations to the dangers of inadequate and/or unreliable geotechnical information and laboratory test results.

**Q17 Should the area of checking by Accredited Checkers not be extended to the economic aspect of the project rather than be confined only to the question of structural safety?**

**A** A [BEM Circular No. 1/2003](#) has listed cost optimisation as an item under ‘Reviewing’, as against ‘Checking’.

**Q18 What is the difference between ‘Checking’ and ‘Reviewing’?**

**A** Checking and Reviewing are essentially two terms meaning the same thing, but used in BEM Circular No. 1/2003 to differentiate between what is required by local authorities, and what is called for by the owner. The requirements of local authorities are mandatory and specific on matters to be checked. The scope of reviewing called for by the owner can be as wide as he wants it to be.

**Q19 What is the role of an Accredited Checker during construction where many problems can arise from poor construction and maintenance?**

**A** There is no reason why the employer should not extend the services of the Accredited Checker to work with the First Engineer during construction. IF the scope of works extended to Construction, then the role of Accredited Checker is to check on Permanent Works during construction. The role of Accredited Checker does not include checking of the Temporary Works. Therefore, when mention Checking during Construction is mentioned, it means checking, inspection and site visits for the Permanent Works designed by the Submitting Person that have been submitted and checked by the AC.

The Temporary Works are the responsibility of the Contractor and the Professional Engineer with Practicing Certificate engaged to design, endorse and supervise the Temporary Works (PETW) as defined in BEM Guidelines No.001 “The Role and Responsibility of Professional Engineers for Temporary works during Construction Stage”.

**Q20 Can an Accredited Checker take over the work the First Engineer?**

A Generally an Accredited Checker is engaged to check on certain aspect of the work pertaining to the safety of buildings (see Q10). However there is no reason why the owner should not have the Accredited Checker replacing the First Engineer if the owner so desires, provided that there has been no intervention or supplanting by the Accredited Checker within the meaning of [Regulation 31 of the Registration of Engineers Regulations 1990 \(Revised 2003\)](#). The 2<sup>nd</sup> Engineer cannot take over from the 1<sup>st</sup> Engineer unless he obtained the Letter of Release from the 1<sup>st</sup> Engineer or he can follow the procedures stated in BEM Circular No. 008 “Procedure for a Registered Engineer or an Engineering Consultancy Practice taking over the work of another Registered Engineer or an Engineering Consultancy Practice”.

**Q21 When does the work of an Accredited Checker end?**

A It depends on what is in his terms of reference and the scope of works. The scope of works can end upon completion of the checking of the design or it may also be extended to include construction. During the construction stage, the AC only check on the Permanent Works.

**Q22 Is an Accredited Checker allowed to make recommendations on design?**

A Yes. (BEM Circular No. 1/2003)

**Q23 Can an Accredited Checker undertake both the structural and geotechnical checks in the same project?**

A Yes, if he is qualified and registered in both fields.

**Q24 Will the work of structural and geotechnical Accredited Checkers overlap - especially on substructural and foundation design?**

A As the scope of work, whether from the Local Authority or the owner, should be well defined (see answer to Q10), overlapping should not arise.

**Q25 Where the Accredited Checker is a PhD, he may go into ‘finite element’ analysis of which a normal Professional Engineer may know little.**

A Yes, indeed. But since the recommendations are likely to be towards greater safety there should be little problem. It is also no relevant to the tools adopted in checking the design so long as the checking process/analyses are based on sound engineering principles.

**Q26 What if the First Engineer does not agree with the recommendations of the Accredited Checker?**

A If the First Engineer is not comfortable with the recommendations, he can ask the owner to engage a Second Checker (acceptable both to him and the First Checker). The opinion of the Second Accredited Checker shall be final: and the First Engineer either accepts the recommendations of the Second Checker or resigns as consultant to the owner. (BEM Circular No. 1/2003)

**Q27 What if an Accredited Checker runs down the work of the First Engineer, with, perhaps, the intention of taking over the project?**

A This concern is addressed in detail in Regulation 31 of the Registration of Engineers Regulations 1990 (Revised 2003) on intervention, supplanting and taking over the work of another engineer.

It is also addressed in BEM Circular No. 1/2003 on how an Accredited Checker should discharge his professional responsibility with integrity and decorum and not injuring the First Engineer in any way.

**Q28 As there is no clear guideline on when Accredited Checkers should be called in, and as Local Authorities usually call for them only at the stage of submission of plans for approval, i.e. when physical work is about to commence, will the need for Accredited Checkers not delay the project?**

**A** No. Not if the need for Accredited Checkers is considered early in the project, and they are also appointed early if needed.

**Q29 Should the scope of the work of an Accredited Checker include evaluation of contractor's temporary works? If it should, what are the respective responsibilities of the Accredited Checker and the First Engineer?**

**A** Considering the importance of temporary works, especially in deep excavation for basement construction in urban areas, the First Engineer should conceptualise the temporary works to decide on the need for an Accredited Checker, and if needed, to have him appointed early. The scope of works for the Accredited Checked (AC) if extended to Temporary Works, then it shall be explicitly stated in the scope of works of the Letter of Appointment or MOA for what type of Temporary Works that require the AC to check as this is additional scope beyond the normal AC scope of works by default.

In some mega projects or complicated projects (e.g. KVMRT), the Contractor does engaged the Professional Engineer with Practicing Certificate to design, endorse and supervise the Temporary Works (PETW) as defined in BEM Guidelines No.001 "The Role and Responsibility of Professional Engineers for Temporary works during Construction Stage", in addition, the Contractor under the direction of the Client/Developer also needs to engage Contractor's ICE (CICE), whose role can also be taken up by Accredited Checker to check on the design and construction of the Temporary Works designed and supervised by the PETW.

Where an Accredited Checker is engaged to evaluate the contractor's temporary works, his responsibility and that of the First Engineer are the same as in the answers to Q11, Q12 and Q13.

**Q30 What are the responsibilities of the Accredited Checker when he has finished his checking and the contractor submits an alternative design for the temporary works?**

**A** In the event that alternative temporary works are later proposed, the Accredited Checker's responsibilities for them depend on whether his duties are extended to cover them. By default, the Accredited Checker only checks on Permanent Works designed and submitted by the Submitting Person. All the additional scope of works beyond checking on Permanent Works shall be explicitly stated in the terms of reference and scope of works in the appointment letter/MOA to the Accredited Checker.

**Q31 The Board should set an easy format for Accredited Checkers' reports, instead of leaving it up to them.**

**A** There are already formats for this in BEM/Form/AC/01 for structural works, and BEM/Form/AC/03 for geotechnical works.

## Local Authorities

**Q32 The Uniform Building By-Laws need to be uniformly applied by Local Authorities. As of now, they are not. Also, how is an officer of a small local authority to decide on the need for Accredited Checkers?**

**A** The Uniform Building By-Laws are already gazetted. The difference in their application is perhaps due to different interpretations on them, and/or certain conditions attached to approval of submissions which are outside these By-Laws.

The Ministry of Housing and Local Government will be holding workshops in three regions and issuing guidelines to streamline the application of these By-Laws. After that the Board intends to put out explanatory notes to key players in the building industry.

## Fees

**Q33 Is there a scale of fees for Accredited Checkers?**

**Who is to set the fees?**

**Are there guidelines for the calculation of fees?**

**Who is to pay the fees?**

**A** There is as yet no scale of fees, but the Board has recommended two approaches to fees:  
(i) on percentage - 30% of the First Engineer's fee for what is to be checked  
(ii) on time input basis of the personnel in the ECP (e.g. AC and his supporting engineers and staff)  
(iii) on man-month basis of the personnel in the ECP (e.g. AC and his supporting engineers and staff)

There are also no guidelines for determination of fees, but an Accredited Checker should be able to determine the work and time involved to carry out the scope of work assigned to him, and work out what would be a fair and reasonable fee to charge the owner.