ACCREDITED CHECKERS
FREQUENTLY ASKED QUESTIONS (updated June 2021)

Accredited Checkers and Qualification for Registration

Q1 **Why are Accredited Checkers introduced?**

A The need for checking of engineering design works has long been recognised. The 1974 Street, Drainage and Building Act already has a 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 recent amendment to the Act in 2019 (Act A1588) under section 72(2) has made a provision that any person who intends to erect any building shall cause to be submitted by Principal Submitting Person or Submitting Person (SP) to the local authority or the relevant statutory authority a geotechnical report for erection involving slope with a gradient more than twenty-five degrees and total vertical height more than ten meters which the report shall be verified by an Accredited Checker (AC) registered with the Board of Engineers under the Registration of Engineers Act (REA) 1967 (Act 138).

The introduction of AC in the amended Registration of Engineers Act of 2002 (Revised 2015) 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 AC only cover two areas, namely Structural (e.g. high rise buildings but exclude bridges) and Geotechnical (e.g. mainly slopes and retaining walls). The AC' scope of works is to check the Permanent Works designed by the Submitting Person (Professional Engineer with Practicing Certificate, PEPC)

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

A The role of AC is to check, with right competence and specialised knowledge, all aspects of designed Permanent Works by another Professional Engineer with Practicing Certificate (PEPC) (e.g. Submitting Person of the Project) referred to him for checking with particular reference to the stability and safety of the Permanent Works. As such, 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) before the AC can carry out the checks. AC shall also highlight any missing or inadequacy in the Permanent Works design to the PEPC (Submitting Person) for him to reconsider in submitting the final design. The AC's scope of works does not include checks 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 (Revised 2015). BEM Circular No. 010 "Guideline for Checking / Reviewing the Work of Another Engineer" can be referred.

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 PEPC.

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 Civil, Structural and Geotechnical disciplines. 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 stability and safety of buildings especially high-rise buildings (but exclude bridges). The emphasis for AC Geotechnical is on stability and safety of slopes, retaining structures and deep excavation.

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 stability and 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 are given in BEM Circular No. 010 "Checking/Reviewing the Work of Another Engineer". The Table in Section 3.2 of the Circular stated clearly the differences in the scope of works for Checker, Reviewer and Others (*e.g*. Inspection).

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). Table in Section 3.2 of BEM Circular No. 010 "Checking/Reviewing the Work of Another Engineer" tabulated the scope of works for Checker.

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

A The Accredited Checker is responsible for his recommendations and findings. Refer to BEM Circular No. 010 "Checking/Reviewing the Work of Another Engineer".

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. The AC should know the scope of works that he is undertaking and the liabilities when he undertakes a checking assignment. The Accredited Checker is responsible for his recommendations and findings. Refer to BEM Circular No. 010 "Checking/Reviewing the Work of Another Engineer".

Q14 What about Professional Indemnity Insurance?

A (i) The AC should realise 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, and

(ii) The AC is recommended to have professional indemnity insurance cover to undertake the work.

Q15 Are Accredited Checker recommendations be considered as 'second opinion' and should he be held responsible or liable for them?

A Yes, his recommendations are 'second opinions' but he carries the responsibilities and liabilities if his recommendations are adopted by the SP.

Q16 What is the difference between 'Checking' and 'Reviewing'?

A Section 3.2 of BEM Circular No. 010 "Checking/Reviewing the Work of Another Engineer" stated clearly the difference in the scope of works for Checker, Reviewer and Other (*e.g.* Inspection).

Q17 What is the role of an Accredited Checker during construction stage where many problems may arise?

A In principle the role of AC does not include checking during construction stage. However, the employer can extend the services of the AC to work with the First Engineer during the construction stage for any specified area of the Permanent works.

The scope of AC does not include checking of the Temporary Works design. The Temporary Works are the responsibility of the Contractor and the PEPC 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".

Q18 Can an Accredited Checker takes over the work the First Engineer?

A Generally an AC is engaged to check on certain aspect of the works pertaining to the stability and safety of buildings. However, there is no reason why the owner should not have the AC replacing the First Engineer if the owner so desires, provided that, there has been no intervention or supplanting by the AC referring to Regulation 31 of the Registration of Engineers Regulations 1990 (Revised 2015). The 2nd Engineer cannot take over from the 1st Engineer unless he obtains the Letter of Release from the 1st 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". Please refer to BEM Circular No. 010 "Checking/Reviewing the Work of Another Engineer" Section 4.4.2 which detailed the proper processes.

Q19 When does the work of an Accredited Checker ends?

A It depends on what is AC's terms of reference and the scope of works of his engagement. In principle, the scope of works ends upon completion of the design checks. However, the employer can extend the services of the AC to work with the First Engineer during the construction stage for the any specified area of the Permanent works where the AC's role is only to check on these Permanent Works.

Q20 Is an Accredited Checker allowed to make recommendations on design?

A Yes. (BEM Circular No. 010 "Checking/Reviewing the Work of Another Engineer")

Q21 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.

Q22 Will the work of structural and geotechnical Accredited Checkers overlap - especially on substructural and foundation design?

A The Structural AC scope of works starts from building structure down to the pilecaps. The Geotechnical AC scope of works starts after the pilecaps (foundations e.g. piling, geotechnical bearing capacity, settlement, etc).

Q23 What if the First Engineer does not agree with the recommendations of the Accredited Checker?

A BEM Circular No. 010 "Checking/Reviewing the Work of Another Engineer" Section 4.0 detailed the possible options to be adopted.

Q24 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 2015) on intervention, supplanting and taking over the work of another engineer.

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

BEM Circular No. 010 "Checking/Reviewing the Work of Another Engineer" Section 4.2 also prohibit this action. Section 4.5 also detailed the conduct and responsibilities of Checker/Reviewer.

Q25 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 AC if extended to cover Temporary Works, then it shall be explicitly stated in the scope of works of the Letter of Appointment or Memorandum Of Agreement 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.

BEM Circular No. 010 "Checking/Reviewing the Work of Another Engineer" Section 1.6 stated that the Client may extend the scope of checking to include temporary works during construction.

In some mega projects or complicated projects (e.g. KVMRT), the Contractor does engage 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 AC to check on the design and construction of the Temporary Works designed and supervised by the PETW.

Q26 What are the responsibilities of the Accredited Checker when he has finished his checking of Temporary Works (as extended services) and the contractor submits an alternative design for the temporary works?

A If the AC scope of works has been extended to cover Temporary Works which he has completed and submitted his report, and in the event that alternative temporary works are later proposed by the Contractor, then it entails a different scope of works.

Q27 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.

Fees

Q28 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 no fixed scale of fees at this moment, general practice on the fees as follows:
(i) on percentage basis – One Third (~33%) of the BEM Scale of Fees for what is to be checked up to design stage. If the scope of works extended to Construction Stage, a minimum of additional 10% of BEM Scale of Fees to be considered which exclude supervision cost (if required) to be reimbursed.
(ii) on time input basis of the personnel involved in the ECP (*e.g.* AC and his supporting engineers and staff)
(iii) on man-month basis of the personnel involved in the ECP (*e.g.* AC and his supporting engineers and staff)
An AC 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 carry out the works.