



BOARD OF ENGINEERS MALAYSIA

GUIDELINE NO. 008

GUIDELINES ON THE ROLES OF CONSTRUCTION WORK DESIGNER (CWD) AND PRINCIPAL CONSTRUCTION WORK DESIGNER (PCWD) UNDER THE CDM REGULATIONS 2024

In exercise of the powers conferred by paragraph 4(1)(f) of the Registration of Engineers Act 1967 [Act 138], the Board of Engineers Malaysia hereby determines guidelines on the roles of the Construction Work Designer (CWD) and Principal Construction Work Designer (PCWD) for registered person under the CDM Regulations 2024, which was gazette by the Federal Government on 31 May 2024, as stated herein below:

Preamble

The Occupational Safety and Health (Construction Work) (Design and Management) Regulations 2024 [P.U.(A) 147/2024], herein referred to as CDM Regulations 2024, come into operation on 1 June 2024. These Regulations shall apply to all places of work in which a project is carried out.

The following are some of the interpretations stated in the CDM Regulations 2024:

- **“construction phase”** means the period of time when a construction work of a project starts until the construction work in the project completes;
- **“pre-construction phase”** means any period of time during which any design or preparatory work of a project is carried out, including during construction phase;
- **“construction work designer”** means any person who in the course or furtherance of a business-
 - (a) prepares or modifies a design; or
 - (b) arranges for, or instructs, any person under his control to prepare or modify a design, relating to a building, structure, product or mechanical or electrical system intended for a particular structure;
- **“principal construction work designer”** means any construction work designer appointed by the client under paragraph 7(1)(a);
- **“project”** means any project which includes or is intended to include a construction work and includes all planning, design, management or other work involved in a project until the end of the construction phase;
- **“design”** means any drawings and its details and includes any specification and bills of quantity, including specification of any plant or substance, relating to a structure, and any calculation prepared for the purpose of the design;

Appointment of principal construction work designer (PCWD)

1. Under Regulation 7 of CDM Regulations 2024, the Client shall appoint the PCWD, before the construction phase begins.
2. For projects involving Engineering/Architectural Consultancy Practice, the PCWD must be either:

- (a) One of the design organizations (Architectural/Engineering Consultancy Practice) engaged to carry out in carrying out the design of the project,
 - (b) **OR** a separate design organization not part of the team designing the project.
3. Engineering Consultancy Practice (ECP) offering the PCWD services, shall have the necessary skill, knowledge, experience and capability (SKEC) to carry out the PCWD role. The Professional Engineer with Practising Certificate (PEPC) working for the ECP taking up the PCWD role, shall have the necessary skill, knowledge, experience and training (SKET). Those without previous experience, would be required to undertake “CDM Professional/ CDM Coordinator” courses provided by training centres recognized by Department of Safety and Health (DOSH) to acquire skills and knowledge to deliver the PCWD role.
 4. The PCWD must have the knowledge and skill to apply the principles of Design Risk Management, the General Principle of Prevention and any guidelines related to CDM Regulations 2024. Information on OSHCIM and Frequently Asked Questions about CDM Regulations 2024 is available on the DOSH website: <https://dosh.gov.my/>.
 5. The PCWD’s role and responsibility do not fall under the present scope of professional engineering practice services and are not included as part of the BEM Scale of Fees. The service provided as PCWD shall be compensated as additional professional service. The sample agreement between a PCWD and a client can be sought from Royal Institute of British Architects (RIBA) website: <https://www.architecture.com/digital-practice-tools/riba-contracts/riba-cdm-regulations-principal-designer-professional-services-contract>

Duties of construction work designer (CWD)

1. The duties of CWD are stated in Regulations 11 of CDM Regulations 2024.
2. ECP/PEPC are encouraged to undergo “CDM Professional/ CDM Coordinator” training, provided by training centres recognized by DOSH, on CDM principles and Design Risk Management to acquire skills and knowledge to carry out the role of CWD effectively.
3. When preparing or modifying a design, the CWD should carry out Design Risk Management to identify the hazards and assess the risks to the safety and health of any persons. The General Principle of Prevention should be taken into account to eliminate, reduce or control any foreseeable risks.

Duties of principal construction work designer (PCWD) at the pre-construction phase

1. The duties of PCWD are stated in Regulation 12 of CDM Regulations 2024. The PCWD shall advise and assist the Client in preparing the Pre-Construction Information (PCI) before the design stage begins.
2. The duties of the PCWD, are inclusive of those of the CWD, if the PCWD is one of the design organizations engaged to carry out design of the project.
3. PCWD should ensure that the CWD complies with its duties regarding handling design risk appropriately, which can be done as part of the design review process and through regular progress meetings. The design review process integrates the risk management process in the design phase and encourages collaboration between Client, designer and contractor.
4. Regulation 14 requires the PCWD, during the pre-construction phase, to prepare, review and update a safety and health file (SHF) which shall contain any information relating to the project which is likely to be needed during any subsequent project to ensure the safety and health of any person.
5. If the appointment of a principal construction work designer concludes before the end of the project, the PCWD shall present the SHF to the principal construction work contractor.

The General Principles of Prevention

1. The General Principles of Prevention, as referred to in Regulation 11 and 12, are listed in the First Schedule of CDM Regulations 2024 as below:
 - (a) Avoiding risks;
 - (b) Evaluating the risks which cannot be avoided;
 - (c) Controlling the risks at source;
 - (d) Adapting the work to the individual, especially as regards to the design of place of construction work, the choice of plant and the choice of working and production methods, for the purpose, in particular to reduce monotonous work and work at a predetermined work-rate and to reduce their effect on health;
 - (e) Adapting to the technical progress;
 - (f) Replacing the dangerous with the non-dangerous or the less dangerous;
 - (g) Developing a coherent overall prevention policy which covers technology, work organization, working conditions, social relationships and the influence of factors relating to the working environment;
 - (h) Giving priority to collective protective measures over individual protective measures;
 - (i) Giving appropriate instructions to employees.

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