

PRACTICE NOTE SERIES – PRESCRIPTIVE STANDARDS

PRACTICE NOTE ID: 4.6 (2A)

Effective: 8 August 2018

1. Rationale

- 1.1 A number of registered professional engineers (“RPEQs”) have made enquiries to the Board of Professional Engineers of Queensland (“BPEQ”) about the meaning of the term ‘prescriptive standard’ as defined in the Professional Engineers PE Act 2002 (Qld) (“PE Act”). The purpose of this Practice Note is to provide an explanation of the meaning of ‘prescriptive standard’.

2. Introduction

- 2.1 The PE Act provides that a person who is not an RPEQ must not carry out professional engineering services. The term ‘professional engineering service’ is defined in the PE Act as follows:
- (a) professional engineering service means an engineering service that requires, or is based on, the application of engineering principles and data to a design, or to a construction, production, operation or maintenance activity, relating to engineering, and does not include an engineering service that is provided only in accordance with a prescriptive standard.
- 2.2 A ‘professional engineering service’ does not include an engineering service that is provided only in accordance with a prescriptive standard. This operates as an exception to the requirement of the PE Act that professional engineering services must be carried out only by RPEQs, or by persons under the direct supervision of RPEQs. If a person carries out an engineering service that is provided only in accordance with a prescriptive standard, that person will not contravene the PE Act.

3. Requirements of the PE Act

- 3.1 The term ‘prescriptive standard’ is defined in the PE Act as follows.
- (a) for carrying out a design, or a construction or production PE Activity, relating to engineering; and
 - (b) the application of which, to the carrying out of the design, or the construction or production activity, does not require advanced scientifically based calculations.



- 3.2 For a document to be a prescriptive standard, each of the following five elements must be satisfied:
- (a) it is a document; and
 - (b) it states procedures or criteria; and
 - (c) the procedures or criteria are for carrying out a design, or a construction, production, operation or maintenance activity, relating to engineering, and the document explains how to apply those procedures or criteria to the particular task to which the document relates; and
 - (d) the document must leave little to no room for personal choice or judgement in the application of the procedures or criteria stated in the document; and
 - (e) the application of the procedures or criteria stated in the document must not require advanced scientifically based calculations.
- 3.3 The prescriptive standard must be a document. A document is something on which information is recorded. A document includes: (a) any paper or other material on which there is writing; (b) any paper or other material on which there are marks, figures, symbols or perforations having a meaning for a person qualified to interpret them; and (c) any disc, tape or other article or any material from which sounds, images, writings or messages are capable of being produced or reproduced (with or without the aid of another article or device). A prescriptive standard cannot be a procedure or criteria that is not physically recorded or documented in some way. Therefore, procedures or criteria carried out from memory, without being documented in any way, cannot be a prescriptive standard.
- 3.4 The document must state procedures or criteria. 'Procedures' are ordinarily understood to mean modes of performing or conducting a task, and 'criteria' to mean principles or standards by which something is judged or assessed. If the document does not state one or more modes or ways of performing or conducting the task to which the document relates, or one or more principles or standards by which the task to which the document relates can be judged or assessed, it cannot be a prescriptive standard.
- 3.5 The document must detail and explain exactly how the procedures or criteria are to be applied to the task to which the document relates. If the document does not do so, it cannot be a prescriptive standard.
- 3.6 The use of the word 'prescriptive', which means 'laying down the rules of usage', means there must be little or no room for personal choice or judgement in the application of the procedures or criteria stated in the document. Particularly relevant is whether the procedures or criteria stated in the document require a choice or judgement, based on engineering knowledge or experience, to be made in applying them. If they do, the document cannot be a prescriptive standard.



- 3.7 The application of the procedures or criteria stated in the document must not require advanced scientifically based calculations. Consistent with the first object of the PE Act– to protect the public by ensuring professional engineering services are provided by a RPEQ – advanced scientifically based calculations are calculations that could only be performed by a person with the level of knowledge and experience required of a RPEQ. Calculations required by a prescriptive standard must be calculations that could be performed by a person without such a level of knowledge and experience. If calculations stated in a document could only be performed by a person with the level of knowledge and experience required of a RPEQ, the document cannot be prescriptive standard.
- 3.8 Once it is established that the above five elements are satisfied and the document in question is prescriptive standard, for an engineering service to be provided only in accordance with a prescriptive standard and thereby fall within the exception provided for in the PE Act, it must be established that the engineering service in question was wholly provided in accordance with the standard.

4. Practice

- 4.1 The PE Act gives an example of an Australian Standard that is considered to be a prescriptive standard, namely AS1684 – Timber Framing Code, published by Standards Australia. However, most Australian Standards will not satisfy the definition of ‘prescriptive standard’ in the PE Act because, for example; they may require the exercise of judgement or personal choice and/or require advanced scientifically based calculations.

5. References

- 5.1 *Acts Interpretation Act 2002* (Qld)
- 5.2 *Professional Engineers Act 2002* (Qld)
- 5.3 Australian Concise Oxford Dictionary