

An Explanation of the BOABC Examination Development Process

How are BOABC examinations developed? The BOABC has a voluntary committee of members who work with the International Code Council Certification and Testing Department to develop and maintain Level One, Two and Three examinations based on the most current BC Building Code.

What is the International Code Council and what does it do? The ICC is the oldest and most prestigious professional organization for construction code administration and enforcement worldwide. The BOABC has a Support Service Agreement with the ICC for the following: creation of examinations [Psychometric Support Services]; maintaining question banks [Secretariat for Question Banks and Examination Records]; generating tests [Test Assembly, Printing and Secure Shipping]; and test scoring [Test Scoring and Reporting Services]. The BOABC has been a Charter Chapter of the ICC since 1988.

How are the examinations prepared? The BOABC Examination Committee develops questions and answers to create and maintain examinations. The ICC assembles test forms [examinations] to specifications determined by the BOABC from question banks developed by the Examination Committee. The Committee meets periodically to review examinations and to revise and upgrade examinations to new BC Code Changes.

How do the examination questions differ from one exam sitting to another? There is a large pool of questions for each examination, which is chosen at random by a computer program according to the exam content category for each exam. Consequently, the questions in a Level Two exam at one examination sitting, at a particular time of the year, for example, will not be the same questions as a Level Two examination prepared for another examination sitting time.

Is one test easier than another? The examinations are carefully constructed in order to minimize variations in difficulty from one exam sitting to another. However, it is possible to have slight variations in difficulty based on the particular combinations of test questions that are selected. This is taken into account when the passing scores are set, so it does not matter which exam form a candidate takes.

What is a passing score and how is it determined? A passing score is the score set by the Examination Committee as the minimum score needed to pass the exam. The score is technically called a scale score and it is set at 80. This process is called a cut score process. During this process the expert judgment of the Examination Committee, serving as Subject Matter Experts [SME's], discuss the minimum level of competence that is required to perform the job tasks. This discussion targets the specific basic knowledge, skill, and abilities that a qualified building official practitioner needs, in order to perform their job tasks at that level, and no more. The Committee then systematically evaluates each question in the examination data bank and rates its level of difficulty. Some questions have greater difficulty, or a lesser difficulty, as determined by the SME's; as a result, each question is given a value, or cut-score.

Some questions, by their nature, are more difficult to answer than others. Even though they pertain to the same section of the exam. It would be unfair to require an exam candidate, taking one examination of somewhat more difficult questions, to answer as many questions correctly as a candidate who took an exam made up of easier questions. Therefore, the statistical procedure, known as scaling, corrects for differences in test form difficulty.

Why scale the scores? A scaled score transforms a raw test score, the number of test questions answered correctly, into another measurement unit called a scale score – the scale score is not the number of questions answered correctly, nor the percentage of questions answered. If the BOABC simply reported the total number of questions answered correctly [the raw score], there would be a different passing score for each form [examination] of the test, because of the differences in difficulty noted above [the cut score value of each question]. Consequently, the ICC testing service converts the raw scores to a constant scale. The designated 80 for BOABC exams continue as the minimum score required for passing regardless of the test administered at any particular sitting. The number of correct answers needed to pass can vary, by a small number, of usually one or two questions from one exam sitting to another - again, due to the cut score value of each question.

What is reported? The ICC processes the examination and reports the scaled score to the BOABC. Scores of 80 or above are reported as PASS. The ICC does not report the numeric score; the score report simply indicates a passing score by stating PASS. Those who fail the examination are notified they have not succeeded and are provided with a diagnostic information sheet indicating their performance on the major content areas. This information is for self-evaluation only. If a candidate has a short bar on the score report chart in a content area that should indicate that more study is necessary in that content area of the examination.

What if an examination candidate questions the validity of a question? During the exam if a question and/or the answers appear invalid or flawed, the exam candidate can write the number of the question and their reasoning on the examination booklet, preferably on the cover page. Or a candidate can report the question to the BOABC after the examination. The information is passed on to the contact at the ICC Certification and Testing Department where it is investigated. In rare cases where a question is found to be faulty or invalid in some way, credit will be given for that question, that question will then be restricted in the question bank and not be used until further investigation by the Examination Committee. This exercise occurs before the final exam results are tabulated for all examinations and reported to the BOABC. The examination scores are then processed and the scores reported to the examination candidates through the BOABC office for distribution to all the examination candidates.