CONQUAS 8th Edition and Mobile Application

CONQUAS 8th Edition

The Construction Quality Assessment System (CONQUAS) was introduced in 1989 to measure the quality level achieved in a completed project. Since then, it has undergone various changes to improve the system of quality assessment.

CONQUAS standards are constantly evolving, due to changes and improvements in processes and technology. There is a need to align it with industry trends to keep it current and relevant. The CONQUAS 8th edition was developed with three main objectives:

• To promote design and materials which support both quality and productivity;
• To optimise CONQUAS value; and
• To align CONQUAS standards to end-users’ expectations.

1. Promote design and materials which support both quality and productivity

   a. Award or Bonus points for better buildable design and material choices
   For the first time, bonus points will be awarded to projects to encourage the use of designs and materials, which lead to higher quality and productivity. This not only supports BCA’s buildability and constructability drive, but also recognises builders which adopt less labour-intensive design and material choices. These include the use of prefabricated bathrooms, precast external facade and internal drywall/lightweight partitions. The use of such prefabricated components will also greatly reduce the need to deploy skilled manpower to carry out the finishing works which are highly labour intensive.

   b. Bonus point for Quality Mark (QM) projects
   BCA’s Quality Mark (QM) scheme started in 2002 to encourage developers to deliver consistency in workmanship for residential projects. To recognise better quality of QM projects, a bonus point will be awarded if the project achieves high quality ratings under the QM rating scheme. The bonus point will make it easier for QM projects to achieve a higher CONQUAS score and will indirectly serve to distinguish QM from non-QM projects.

   c. Bonus point for employing certified CONQUAS/QM personnel
   The CONQUAS/QM Manager and Supervisor Schemes were launched in 2008 to recognise construction personnel who are instrumental in ensuring and delivering projects of high quality. This is reflected in higher CONQUAS scores whenever such personnel are employed in these projects. In the CONQUAS 8th edition, a bonus point will be awarded to projects that employ these certified personnel. This is to encourage builders to employ competent certified personnel on-site which will lead to better quality construction.

2. Optimise CONQUAS value
   Though higher CONQUAS scores generally reflect better workmanship, there is a diminishing return when the CONQUAS score reaches the higher limits. More effort
is required to achieve the higher score without a marked improvement in the quality observed. Some developers and builders also compete to achieve the highest CONQUAS score at the expense of increased manpower. This results in inefficient use of resources and reduced productivity.

Projects aiming for CONQUAS scores of 95 or higher require significantly more skilled workers, particularly doing meticulous finishing works. However, the effort is disproportionate to the improvement in observed quality once the score reaches above 95. To prevent unnecessary and inefficient use of resources, the CONQUAS score is capped at 95. Any project scoring 95 and above will be rated “CONQUAS STAR”, and its score will not be published on BCA’s website. This will deter developers setting high target scores above 95 points.

The capping of scores will not impact quality significantly, yet improves project efficiency.

3. **Align CONQUAS standards to end-users’ expectations**
Architectural trades are more visible to end-users as compared to structural works. As a result, most complaints concern finishing works. Thus the 8th edition has increased the scoring weightage by 5% on architectural works and reducing by a similar percentage for structural works. In addition, a study and data analysis reveal that end-users are more concerned with floor and wall elements among the architectural trades, particularly crack and damages and unevenness. Hence, the weightages of the quality standards for these elements have been adjusted accordingly to closely reflect end-users expectations.
CONQUAS mobile application

The mobile application for CONQUAS provides CONQUAS/Quality Mark information to users ‘on the move’ and assists them in monitoring the workmanship quality of their on-going projects. This application is for industry professionals such as developers, main contractors and suppliers, and home owners.

Benefit
This application features a QM Calculator, Publications, CONQUAS checklists and online links to the BCA Facebook Page and CONQUAS and Quality Mark (CQM) Online.

Figure A: Landing page of CONQUAS mobile application

1) The “QM Calculator” is a useful tool for developers and builders to check the workmanship quality of each unit. The QM-calculator generates the unit score based on the user’s input. This check can be done before the actual CONQUAS/QM assessment by BCA. The various editions of CONQUAS are catered for in the calculation.

Figure B: QM Calculator
2) Users are also able to access CONQUAS manuals and Good Industry Practices (GIP) guidebooks under “Publications”.

![The library of GIP guidebooks under “Publications”](image)

3) The CONQUAS checklists provide users a ready guide to the requirements of assessments and the flow of work. This helps to increase productivity by providing builders an easy reference to procedures.

![Sample of “Checklist”](image)

4) The application also keeps users updated on the latest initiatives and changes. The users will also be able to retrieve information on the assessment schedule and CONQUAS scores with the quick link to the ‘CQM Online’ and BCA website.
Figure E: Links to “CQM Online” and CONQUAS Score on the BCA Website