

SYDNEY • LONDON • DUBAI



ISSUE NUMBER 5

THE BRICK WALL OF PROFESSIONAL STANDARDS IN SOCIETY

The stability of professional standards around the world is reliant not just on governments, but all parties involved in any particular profession. Whether it be the law, medicine, surveying, building surveying, all branches of engineering, architecture or accountancy (have I forgotten anyone?) that stability is like a brick wall. The professions are the bricks. The mortar is the law makers. In the building industry, the bricks and the mortar are in default. The system is not working. The wall has been in a state of increasing erosion since the 1980s. Yes, it started with "Design and Construct".

The increase in design sophistication allowed by the computer age is clearly outstanding to the well being of society. However, for all their amazing advantages, what has been overlooked for too long is that students (school and university) are now too reliant on computers, as are indeed the teachers. Irrespective of the brilliance of the computers, it is particularly important that users of software are able to check the answers arising from their analysis, independent of a computer. Not only that the ability to write and draw neatly by hand, is still an important aspect of integrating efficiently into society whatever the field of interest.

University lecturers provide face to face teaching, instilling enthusiasm and knowledge direct into the head in a way which is impossible via an iPad. Looking back now, I owe my lecturers so much. I am disappointed that it seems Australian graduates do not enjoy the same level of face to face teaching as I enjoyed.

This same problem affects all our schools (State and Private) as well as the universities. We have probably two generations now where both school leavers and university graduates cannot write neatly, invariably cannot draw and increasing require a computer to design something because they are unable to do so from first principles in their own head. I recently asked a graduate engineer to undertake a simple design exercise of a piece of reinforced concrete. Having enquired a number of times as to progress, his response was that he was unable to do so because we did not have a software programme with which he was familiar so to do. It begs the question as to how he (or any other engineer in the same predicament) ever checks his work when he does have a software package with which he is familiar.

The decision by New South Wales and Victoria to do away with the need for chartered status as a key benchmark to obtain approval to certify buildings is nothing less than chronic sabotage. Recently, I was interviewed by a gentleman acting on behalf of the Victorian Government. One of my employees had applied to become a registered engineer to certify buildings in Victoria. I already knew that the employee had applied to be registered and was not chartered. Nevertheless, that did not stop me proceeding in the interest of my employee. At the end of the interview, I asked the interviewer if he was himself a chartered engineer. He replied that he was. I asked him whether he thought it important that chartered status was a key stepping stone in order to certify buildings. His response was to say that it is no longer required. He chose not to elaborate which was probably fortunate for him.

I suggest that individual chartered engineers and architects consider themselves responsible to maintain standards in the building industry. However, as a group, I agree with many others that they have seriously dropped the ball. It cannot be denied. I suggest it all began when overall control through the architect was replaced with "Design and Construct" contracting. Previous mandatory unqualified liability for design and construction was no longer required by the builders and the consultants had to control their risk. This is when site visits by consultants began to disappear. We have all seen the consequence. However, eliminating chartered status as a mandatory requirement is in no way a positive step forward. What is positive about that action? Nothing, except possibly restraint of trade? The truth is we want restraint of trade to ensure that the work is carried out by persons who have had the correct training, not only in the office but on site.

Only chartered engineers can safely appoint new chartered engineers (engineers who certify buildings) in order to maintain standards, leaving aside the inevitable additional risk of corruption which we know from sad experience occurs already with private certifiers. It was good that the interviewer for this particular engineer was a chartered person. I hope the situation is the same everywhere at this time. The rot would have not spread too far. I hope everyone can see the logic as to why deleting chartered status is a huge mistake in order for engineers to be considered fit to certify buildings. I suggest that an automatic improvement of the standard of graduate engineers entering the industry would be to ensure that any university degree must include a year of "permanent on site" training. Further, that in the first three years of experience in the industry, a further full year of site experience is required before an engineer can be considered fit to certify buildings. How can you possibly justify that an engineer is fit to certify a finished building if he himself has never worked on site?

To conclude, the current steps being taken to eliminate the need for chartered status is a huge mistake. Yes, the industry as a whole needed a major shock to the system. Government (on a federal level I suggest) needs to address the issue. All professional institutions involved in the industry need to be included ensuring that new rules cover "design" and "as built" to the same level of detail (or similar) which has been implemented with DBPA in New South Wales. The mortar in the wall needs to proceed, showing due respect for the history of the professional institutions (bricks) so we do not create bigger problems than we already encounter. We need to make all parties step up and recognise that ultimately the responsibility of the professional bodies is primarily to look after society and not simply be a training organisation for young persons.



Charles Rickard
PRINCIPAL, RICKARD ENGINEERING
FIEAust, FIStructE, CEng, MIPENZ, NPR-3

Web: rickardengineering.com

15/05/2023