

'A CALL TO ARMS'

To all Chartered Engineers, Architects and Other Registered Certifiers

I am excited by the combined initiative of federal and state governments to consider introducing the 'Building Manual' as the cornerstone to fix the ever-worsening problems of quality in building in Australia today. In 2018, the Building Confidence Report was commissioned by all Australian state and territory building Ministers. This led to industry leaders collaborating to develop the Building Manual Guideline. See www.buildingmanuals.org In summary, it nominates what details of certification and documentation of record must be collected together by the PCA to form a 'Building Manual' for any particular building. It aims to provide a complete record of all important information relating to the design and construction of the particular building. The PCA will only be allowed to release a Certificate of Occupancy once the specified contents of the Building Manual are complete. Should compliance not occur, then the PCA will be held to account.

It's Time to Take Responsibility - No More Disasters!

I suggest this is a golden opportunity for 'Chartered Persons' of all disciplines and equivalent (CPE) to re-emerge from their cocoon of self-imposed 'we have to control our risk' to again fulfill the long-term established obligations of being a 'Chartered Person' given to them 200 years ago in the time of Governor Macquarie and Francis Greenaway.

Representative bodies, not limited to but certainly including EA, AIA, ASCE, ACE, SBSE need to realise that the Building Manual gives them the opportunity to finally step forward and re-establish their proper involvement to create meaningful certification, not the current general cocktail of certificates without value.

The Way Forward

"Full design with final design certification only at the end of the project, including a full inspection service and as built drawings".

I suggest that all projects should build only with staged finalised documentation, created after completion of the tender process, not using the tender drawings which so often happens today. These drawing will still be subject to a final update to include all site instructions/design changes to drawings at the end of the project in order to give complete 'As Built' documentation. Surely, it is overdue that the computer-age facilitates this ideal solution. It is time CPE came to terms with the negative impact of 'Design and Construct' on the value of their traditional services. I suggest this is something which is at least 30 years overdue.

A few basic truths:

1. 'Control our risk' is a total fallacy. The cost of Indemnity Insurance in Australia 2021 has typically risen by 60% in the last five years and from personal experience, that relates to a policy on which there has been no claim (fingers crossed). The impact of the poor standard in building and negligence in regard to the introduction of new building materials (without appropriate due diligence) has impacted on everyone. Indemnity Insurance is becoming increasingly hard to obtain with large cost increases every year. This year apparently US\$1 billion of cover has been withdrawn from the market worldwide.
2. The impact of current industry work practice on our young engineers and architects coming into the workplace is significant. I suggest we are creating a generation of desktop computer designers with no actual building experience because they rarely, if ever, go to site to see what they design and draw.

3. The focus of our universities on revenue from foreign students has coincided with a fall in the standard of our new graduates coming into the building industry. I suggest it is a combination of reduced direct contact in the lecture theatre and the impact of the computer age. Too many graduates leave school and then university, unable to spell, neatly write or draw by hand.
4. Finally, I suggest all university courses should now include practical experience in industry split between a site office and a design office to help improve the market value of our graduates entering the workplace.

I believe, the principal cause of all our problems has always been that CPE have allowed themselves to be pushed aside. The problem is not restricted to Australia. My contacts in the United Kingdom say much the same thing. My own experience in New Zealand does show they have somewhat better control, however they have had their problems also.

Only CPE Can Solve the Problems

The role of the Chartered Person has always been to act in a manner to respect the interests of all parties involved in a particular project. This is our code of conduct. However, we have never come to terms with the contractual change resulting from 'Design and Construct'. We are not just another subcontractor on a project. We are there to make sure buildings are constructed to an acceptable standard in every discipline. We are the only professionals who can make that happen. Governments and PCAs cannot possibly be expected to understand the contents of an estimated 650 Australian Standards which relate to building. In addition, there is the Building Code of Australia. Only representatives of each individual discipline involved in the project can provide the necessary expertise.

There are seven chapters in EA each representing a different discipline of engineering. Add to them AIA, ACE, ASCE, SIBSE, 'Fire Experts', 'Acoustic Experts' and 'Energy Experts'. They all need to work together to create a coordinated management committee. They need to create a formal statement of work practice for each discipline, covering services which provide full design, full inspections and unqualified certification. All subcontract partition of design responsibility must answer to only one over-all certifier per discipline per project. Why not also resurrect an indicative fee scale?

If this does not eventuate, there will not be the correct support to the PCAs and Governments to realise the full value of the Building Manual. Certainly, individual responsibility would be traceable, but we need to get buildings constructed correctly in the first place in every discipline, not just rely on the Building Manual to be able to trace responsibility once completed.

You CAN Make a Difference

To make meaningful change, I need your help. If you agree with the contents of this paper, please register your support by contacting your particular professional organisation, be it one listed above or other and demand action to support the concept of the Building Manual and achieve meaningful certification. Further, show you want action by clicking this link <https://rickardengineering.com/a-call-to-arms/> and simply comment 'yes' on our blog. We'll share the results with the professional organisations.



Charles Rickard

PRINCIPAL, RICKARD ENGINEERING
FIEAust, FStructE, CEng, MIPENZ, NPR-3
Web: rickardengineering.com