

## Introduction:

The below submission does not fit with the prescribed format, as the Shergold Weir Confidence Report properly addresses many issues, particularly the use of BCA Performance compliance Reports to justify mistakes or circumvent expensive Deemed to comply provisions.

The Licensing of Building Professionals should eliminate a good proportion of the non-compliance issues.

Below is what I believe are other issues which also need to be addressed. They are observations made based on my 35 years' experience in the design and construction industry as a Registered Professional Engineer. My experience includes building design and construction, contract superintendence and 20 years of working on defects matters, in differing jurisdictions in Expert Evidence, defect identification and rectification, through various strata managers, insurance claims and mediated rectifications. I am referenced by Justice Young in Case SC 1230 (2004) in a security of payment matter.

I am Chartered Professional Engineer, graduated from UNSW, registered on the National Engineers Register, a member of Engineers Australia Risk Engineering Society. I have post graduate qualification in Arbitration and am a member of the Resolution institute, I am a member of the Housing Industry Association and Strata Community Australia. I am registered on the board of professional Engineers QLD. I am also a licensed builder.

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### 1. Builder Qualifications / capabilities:

The Builders who make mistakes that result in defects are underqualified to produce medium density, let alone high density Highrise.

To acquire a building license, one needs a Building Certificate from TAFE (or an equivalent to upgrade from another license), references and to show two years' experience post qualifications. Or do a bridging course and sit a basic test to upgrade from another license. None of these incorporate the knowledge necessary to complete medium or high-density developments.

This type of license is great for building houses (and we are probably the best in world at doing so), however the **Licensing is not geared for multi-story construction.**

An Architect with two years' experience Or an Engineer with similar experience and after sitting a test qualify, but for obvious reasons they rarely become builders.

In the past multistorey towers were limited to commercial office development, they were contracted and there was separation, between the Builder, the Developer, Consultants and the Authorities Certifying. We do not hear of any issues with these buildings, then it is reasonable to assume that the model employed to produce these buildings, works.

Large Builders still currently retain Engineers and Architects as employees to fully superintend the design and construction.

If we assume that the unregulated model works, it would be prudent to mimic at least proportions of this system. This cannot be simply be an imposition on the Professionals employed, it is about actually employing these professionals. Ergo, there must be a mechanism that forces the Developer to appoint a Superintendent (Architect or Engineer), to administer the contract, where payment is not made where non-compliances exist.

Or the “Building Designer” appointment is prescriptive and Forces the Developer to enter into a consulting Agreement, with a Licensed Building Designer to not only Warranty compliance with the BCA, but incorporate a predetermined points of inspection and interim certificates to be issued (as used to occur, when Council were the sole Certifying Authority).

## **2. Retentions to deal with Defects (Learning from Commercial Contracts):**

Under a Commercial Building Contract, there was a Performance Bond (Usually 5%) and retention during construction (10% to 5% of the contract value, 2.5% released on completion and 2.5% retained for 52 weeks), to ensure that the Builder is financially capable and also performed under the contract. These and control of progress payments were the sole means of ensuring performance under the contract. (this also controlled the payment to the sub-contractors under the Security of Payment Act and progressively controlled the quality from them).

The quality was supervised under these Agreements by the Superintendent (Architect or Engineer), the quality and compliance with the BCA, Australian Standards and Authorities requirements are all pre-requests to receiving Progress Payments, which was transferred down by the Builder to the Sub-contractors. This ensured that errors are minimised or were captured before they became an economic problem to the Project. (One can assume that the Certification for deregulated Authorities, can fit under “Building Designer”)

However, in the current residential situation (my experience with defective buildings is), the Developers and the Builders may be separate companies but are probably owned by the same people, which eliminates the contractual obligations to perform on the specifications prepared by the Architect and Engineer. These are the first things ignored in a situation when there is no separation of Powers that allows the checks and balances. Additionally, where there are no checks, if there is an error by a sub-contractor, the builder accepts the fault with a commiserate reduction in payment, followed by a Performance based Compliance.

Simply, the quality and defects in Commercial building construction are managed through the selection of the builder, then through the contract progress payments, performance bonds and Retention. Where Major defects are managed through the work and minor through a list completed before practical completion, with a further 2.5% retained for a 52 Weeks warranty period after repairs to a final defects list.

Good Developers may apply this even in a Design & Construct Contract. However, in a situation where the Developer and Builder are owned by the same people, or the Developer is unscrupulous, these checks and balances are the first things that go in the cost saving.

Also, there are anomalies on how the funds are managed between the Lender, Developer and Builder.

It is often the case, when one borrows for a house to be built, the lender, will send an assessor to approve progress and would pay the builder directly, ensuring that the funds end up in the product / house.

This model does not work for a large Developer, however, in a properly managed project, the lenders will ask for verification of costs, contracts and presales, with progressive draw-downs accurately managed. However, I have seen situations where smaller and private funders do not follow these protocols, they do not complete appropriate due diligence on the builder, developer, focusing only on security. This further adds to the lack of build quality particularly where the building and development companies are related.

The solution may be a requirement by the Building Commissioner for these retentions and checks to occur through the project, also for the lenders to accept some responsibility before handing out the loans to the Developer. That is progressive accountability of the people who control the flow of funds, not just the Professionals at the end of the food chain. Obviously, this has to be balanced against creating a different set of bureaucratic obstacles.

Certainly a 2% Bond to do a report on a building, which has not been progressively supervised, then do repairs nowhere enough to deal with poorly built buildings. In a Commercial contract, where the defects have been attended to, mostly prior to Practical Completion, retention is 2.5%.

### **3. On Insurance:**

Currently, the Home Building Act requires a builder to provide Home Owners Warranty (HOW) for building an extension through to a house and up to a three story walk up. This HOW insurance is not required for residential buildings over 3 levels. This is anomalous, where there is more protection on easier to build buildings and probably less risk.

Insurance of all residential buildings was available, it existed until the HIH Collapse. Unfortunately, it was progressively watered down over a number of years, due to the burden of large defects claims. Currently, HOW insurance is no longer required for any building over three levels including multi-storey Buildings.

For the smaller (less than 3 levels buildings), the Insurers assess a builder for insurance based mostly on financial capabilities so the insurer can recover a loss. The assessment of Capability of the Builder is then based on a Financial capacity (which is quickly side stepped by some builders after getting the insurance). Unfortunately, the most important aspect of technical competency is not part of the assessment. Even this check is not available for a multistorey building. It means that a person with a license having as little as two years' experience, is all that is required to build anything not requiring insurance.

So not only is a purchaser is relying on the Builder's capability, also the HOW insurers is doing the same, by relying on the Governments Licensing strategy. One can argue, our issue is not about the market's confidence in the high rise buildings, but the confidence in the licensed Builder's ability to build these buildings, and hence confidence in the Building Licensing system. Please refer to item 1.

One of the main reasons for defects is as a result of incapable Builders. More defects resulted in more claims, forcing the Government to water down the consumer protection of HOW insurance. It has been watered down, from a warranty (first resort) to insurance (last resort) to currently limited last resort. Even with the current insurance the Regulations, are complicated and watered down, to really only dealing with "Major" failures" for three story buildings.

Accordingly, for the uninsured buildings, you can end up with a builder with no real experience and lacking in knowledge to even calculate the risk of construction. These few builder's with related Development companies are motivated by profit and glide through the system, cause the major problems make their profit, then disappear.

Unfortunately, the uninsured residential apartments must attend to recovery for cost of rectification on a commercial basis, which is generally useless where Builders and Developers wind up.

So, for the Short term, where there is no insurance and there are major defects, it is only reasonable that the Government provide assistance through loans, to allow the Owners to amortise the expense. The alternative is mortgage stress and sale of an unsellable asset.

### **After Sale Strata Schemes Management Act:**

Developer's influence on the appointment of the Strata Manager, applies considerable pressure on the Strata Manager to meet Developer demands. This has been recognised in the "initial Period" In the Strata Schemes Management Act. However, it needs to go further into the way in which an Expert is appointed to complete Defects Reports, how those Experts are appointed and the timing of appointment.

If the Strata Manager is appointed prior to the Occupation Certificate to deal with preliminary matters, ie working with the Builder, the Certifying Authority and Developer to get the documentation and attend to proper handover. Most importantly also to deal with Defects, before the Occupation Certificate is issued.

I have put forward to some Strata Managers and builders that defects identification should commence at the time of contract completion. This would at least give the builder the opportunity to have sub-contractor complete repairs of their mistakes and take some of the retention pressures (or Bond), so they become part of the cost of rectification. Also allow the repairs to be cheaper with no access issues or disruptions. The cost of defect repairs is mostly expended in the access and time loss to attend to individual defects while the building is occupied, rather than utilise economy of scale and free and speedy access.

Further, it must be noted that a pre-purchase inspection, will only deal with the unit being purchased, yet an owner shares the responsibility of repairs for all units and common property, accordingly, a pre-occupation Certificate inspection (where sub-contractors can repair before final payments are made); Occupation Certificate inspection " Bond" Inspection; then a final inspection say three years to pick up waterproofing issues. (which mirrors what is incorporated in the AS 2124, AS 4000, ABIC MW 2018 etc etc)

Implementation of early pre-Occupation Certificate inspection should reasonably reduce the risk for purchasers before settlement. However, one must be mindful, that many defects will only surface after constant use, such as flashing, water proofing and plumbing. These and the structural aspects should be progressively checked during construction. Essentially, progressive inspections of high risk and costly possible failures; early pre-Occupation Certificate inspection; with the current government "bond" system retained.

### What Should Happen:

For recently completed construction an interim measure would be for the Government to provide financial assistance through interest free or similar loans. It is not a substitute for the original Warranty 1st resort Scheme that the Government administered in the eighties (under the Building Services Corporation) but allows for confidence to be restored in the existing multi-story residential units.

For the Longer Term, in addition to the Licensing of Professionals who check and certify the work, serious consideration of Developer, Lender and Builder management should be implemented as discussed above, with categorised Specialist multi-story Builders to have Professional Engineers and Architects employed full time during the construction to improve the build quality and the insurability, particularly with large high risk issues (Structural, Water proofing and cladding). Also, real separation between builders and Developers with transparency and accessibility to Building Contracts. This would be on top of the Shergold Weir recommendations.

Finally, in hand over the Strata Manager Should be appointed earlier to attend to the future Owners Corporation. Early intervention defects identification before issuing of the Occupation Certificate, so that Sub-contractors can rectify their work or the builder can deal with the issues through Sub-contract retention, also to have clear access ( to reduce costs of repairs).

While in the process of " Building Confidence" is being implemented, current 2 % bond. Should be substantially increased to reflect the risk profile of each individual building ( a badly built building should have a larger Bond, as identified in the Pre-Occupation Certificate Inspection) and maintaining the newly legislated defects identification and rectification process.

This will necessitate a lot of work for integration of the three most relevant Acts, of the Environment Planning and Assessment Act, Home Building Act and the Strata Schemes Management Act, which will take time.