## **NSW Building Reforms**

# 2023 Fire Australia Conference and Trade Expo

**David Chandler OAM, NSW Building Commissioner** Wednesday, 3 May 2023





## The Construct NSW journey from 2019 to 2023



Moving away from one size fits all players and buildings

#### Changing the regulators approach to be one that is proactive and focusses on effort before completion



# Provide the series of the seri

Building Confidence 2019 - 2025

#### Construct NSW will deliver outcomes through six Pillars



#### Proactive regulator

"The Reform program in NSW is making it progressively harder for risky players to operate in NSW"

Helen Kowal (Swaab)

## **Regulators need to be forward looking**



#### **Developers remain the centre of NSW reforms**



#### Character of construction harms in the 21st century

Modern regulators need to think about new harms as previous harms are being mitigated.



#### As more builders transition from Class 1 to Class 2 how can the capability gap be closed?



## **Expanding and maturing industry reforms**

#### Growing core regulator capability (Class 2, 3 & 9c buildings)





### Growing complementary industry governance (Class 2, 3 & 9c buildings)



## Transferring from a Reactive to Proactive approach for building lifecycles





- A new Building Act for all trade work in NSW, including covering engineers, commercial building work and prefabricated building work for the first time.
- Stronger consumer protections, including rollout of decennial liability insurance, comprehensive new rules to target illegal phoenixing and enhanced dispute resolution capability in the regulator.
- Stricter rules around compliance stronger enforcement powers, clearer rules around supervision, expanded use of digital tools and aligning planning system with building controls.
- Reforming building product safety by introducing clear accountabilities for all members of supply chain.
- Exploring opportunities to leverage industry capability through co-regulation.

## Measuring impacts since 2021

#### **Overview of Occupation Certificate audits**

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190 Occupation
Certificate

audits

	121 Anytime/ Anywhere
	inspections



#### 70 audits

- 68 practitioners and 65 developments
- 64% closed
- 7,674 units
- \$3,387,043,842
- \*3 final SWO



#### Councils

- 21 developments
- 31 Construction Certificates and 26 Occupation Certificates audited
- 85 Non-compliances
- Report to be released





#### 11 private certifiers

- 49 developments
- 45,000 pages
- 140 Non-compliances
- 2 cancellations





#### **3 regional certifiers**

- 13 developments
- 18 Construction Certificates and 7 Occupation Certificates audited
- 21 Non-compliances
- Reports to be released

## **Risky players will find it hard to return in NSW**

A number of highly visible players responsible for latent defects have left:

- 1. Merhis Corp Pty Ltd (ABN 90 602 121 737)
- 2. Australian Consulting Engineers Pty Ltd (ABN 82 084 059 941)
- 3. Dyldam Developments Pty Limited (ABN 53 003 408 008)
- 4. A.C.N. 158 838 852 Pty Ltd (Icon Construction Australia (NSW) Pty Ltd) (ABN 97 158 838 852)
- **5**. Trinity Constructions (Aust) Pty Ltd (ABN 55 095 666 710)

... and there will be more



These players were responsible for 1500 new apartments each year (approx. ~10% of market).

#### What we have done and seen



## **Improving fire safety**

- 1. Establish a customer-facing building manual
- 2. Ensure the effective regulation of fire safety practitioners
- 3. Enhance the trustworthiness of Fire Safety Schedules, Fire Safety Certificates and Annual Fire Safety Statements
- 4. Industry capability building
- 5. More effective regulatory and compliance action.





## **DBP design audits have identified**





- Fire services designs are being declared based on conceptual and in some cases single line schematics, with no dimensions and sizes.
- Tendered documents do not include the necessary detail required for construction issued regulated designs.
- Regulated designs for fire services are often insufficient to enable them to be used on site by a registered building practitioner to achieve compliance with the BCA and the relevant Australian Standards.
- Designs are being declared before performance solutions for fire safety are prepared and are therefore not integrated.

#### **DBP Design Audit Process**





#### **DBP Design Audits Statistics**



#### # Audits (yearly)

2021	2022	2023 (Jan-Apr)
6	49	20

\* These data extracted on 27/04/2023



#### **DBP Registered Practitioner Audits Statistics**

#### **RAG** Rating





**Register of orders:** <u>https://www.fairtrading.nsw.gov.au/help-centre/online-</u> <u>tools/rab-act-orders-register</u>

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## **RAB Act OC Audits – Fire Systems**



## Non-compliant attempts to rectify defective works

A slimline concrete panel is acting as a fire separating wall. It has been fractured at mid-wall height rendering the fire compartment non-compliant.

The rectification methodology, which added a fire rated gypsum board, was not consistent with the approved design, is not a tested solution and there was no alternative performance based solution proposed or adopted.



#### **Construction Issued Regulated Designs (CIRD)**



#### GENERAL NOTES:

1. MECHANICAL CONTRACTOR TO ENSURE FINAL COORDINATION WITH THE FOLLOWING:

- ACOUSTIC REPORT REQUIREMENTS
- DA CONSENT REQUIREMENTS
- COORDINATION WITH OTHER SERVICES REQUIREMENTS
- FINAL FIRE ENGINEERING REPORT
- FINAL BCA REPORT - SECTION J REPORT

2. ALL SHAFT DIMENSIONS ARE CLEAR INTERNAL DIMENSIONS

3. SHAFT DIMENSIONS CAN BE MODIFIED TO SUIT THE ARCHITECTURAL LAYOUTS, TO A MAXIMUM WIDTH:DEPTH RATIO OF 4:1

A single line schematic is not a CIRD. This was a declared design.

The coordination with other services has been left up to the contractor.

How can other design practitioners coordinate with this?



#### **Construction Issued Regulated Designs (CIRD)**



- Specify compliant products or detail the performance criteria to ensure the builder installs a compliant product.
- If you write 'or equivalent' make sure that the equivalent is submitted to the design practitioner for approval. It may require a variation to the regulated design.
- Keep copies of the data specifications for the products showing compliance with the BCA.

#### **BCA COMPLIANCE**

#### **Pipe Insulation**

This product has not been tested to AS1530.3 - Methods of fire test on building material components and structures. If a fire retardant paircoil is required, MM Kembla recommends the use of PairCoilMAX.

#### Copper

Manufactured to AS/NZS1571. Recommended maximum operating temperature is 65°C and in accordance with AS1677. A/C manufacturer's operating and installation instructions should be consulted.

White insulation type refrigerant pair coil typically does not comply with Specification BCA 2019 (Vol.1) Amdt.1 C1.10 Fire hazard properties.

#### **Integration Examples – Sprinklers**

## FIRE ENGINEERING NOTE

- USE OF INTERNAL HYDRANTS WITHIN NON-FIRE ISOLATED EXITS TO BE ADDRESSED VIA SUITABLE PERFORMANCE SOLUTION.
- LEVEL 4 CONSIDERED NOT A 'STOREY' AS DEFINED BY THE NCC. PROJECT BUILDING CERTIFIER TO CONFIRM ACCEPTANCE.

Extract from the declared sprinkler designs





Do not declare if the performance solution has not been prepared. Coordinate with the fire safety practitioner.

#### **BCA Non-compliance Examples – Vertical Transportation**



#### Building effective height > 25m

An emergency lift must serve all storeys served by a passenger lift BCA 2019 (Vol.1) Amdt.1 clause E3.4 (b).

The commercial lift serving Levels 2 & 3 was not designed as an emergency lift, therefore, it was not designed with power from the safety (or essential) supply and did not have a WIP phone.



#### **BCA Non-compliance Examples – Fire Rating Systems**



A 'BOSS Fyre Box' has been specified for kitchen exhaust ducts through a slab. BOSS Fyrebox are not a tested system for sheet metal ductwork penetrations.



Specify tested systems that are tested with an identical prototype of the service. Keep the test certificates on file.

#### BCA Non-compliance Examples – Sprinklers

#### LEGEND

#### FIRE SPRINKLER SYSTEM



An AS 2118.1:2017 required sprinkler system shall have sprinklers in the top and base of the lift shaft with a temperature rating of not less than 100°C. Where the shaft also contains electrical and control equipment the sprinklers must be capable of being isolated and drained.

## Project Remediate / FRNSW partnership - protecting lives and safety



Early investigation of buildings to support the NSW Cladding Taskforce

Cladding Product Safety Panel requiring and assuring quality



- Proactive risk management pre and during construction phases
- Collaborative approach to community messaging



Flammable cladding prop at FRNSW facility: Orchard Hills



Defects found within a wall cavity - Darlington



Evidence based decisions – eg CSIRO testing



FRNSW Brochure (in language) 21



## Looking ahead



## Challenges for industry players – Developers, Financiers and Contractors

## Establish clear lines of responsibility and accountability, reducing the risk of disputes/complications for all parties involved in the project.

- Lack of continuity and responsibility is leading to legal disputes and complications for consumers.
- SPVs face challenges in providing indemnification to builders when they are not responsible

**SOLUTIONS INCLUDE:** New contract terms where developers may indemnify consultants and builders for some work done by prior developers and others to ensure clear continuing accountability.





## Strata landscape has many current and emerging issues



Source: Ben Rushton SMH



- Growing number of strata buildings now over 30 years old
- Need to focus on getting remediation contractors rated
- Issues with strata lending to be addressed
- Increased industry take up of Latent Defects Insurance (LDI)
- Consider options for projects caught between Remediate and Intervene

## **Opportunities for Regulator and fire industry** collaboration – and design integration



Multi-disciplinary Design Integration

In this course you will learn about the process of designing a building and what should be achieved at each phase. In particular, the behaviours and processes required to protect the design integrity of a building or place... read more

\$140.00 (inc GST)



- Accreditation of practitioners to certify installed fire • safety measures before the occupation certificate (commences 13 February 2025 or 18 months after new accreditation scheme approval)
- **Building manual** ٠
- Take up of routine maintenance standard AS1851 ٠ (mandated from 13 February 2025)
- Drive improvements in performance solution design ٠ for fire safety
- Improve education across the industry from single ٠ topics / events to longer courses.







## **Related photos**











