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Building Defects – Early Warning Signs



Presenter

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Topics

- Strata Defect Journey -
- Discoveries and Trends -
 - Tell Tale Signs –
- Notification & Prevention
 - Pro-active Measures -

Why so many defects in strata?

Can occur in -

Design



Construction



Can be a result of -

Cost



Process Error



Common causes

Design Process Error



Failure to provide detailed design



Failure to follow design



Failure to follow standards



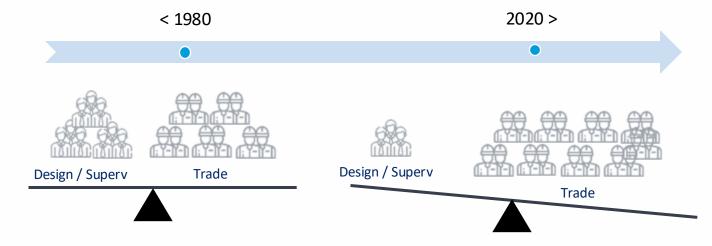
Failure to maintain **Quality Control** during Construction

STRATA DEFECTS JOURNEY

Why so many defects in strata?

Focus has been lost on the detail

Proportion of Designers and Supervision has changed



Developer / Contractor Focus on Strata Buildings		
Delivery of volume >	Increased profits, maintain consumer demand	
Lean Budget >	Often determined by competitive marketing and sales	
Cost focussed construction >	Reductions in material and process	
Compressed delivery times >	Reduction in overheads	

Building Materials

Issues		
Cheaper	Often lighter, reduced quality, reduced lifespan	
Untested	Imported materials often don't comply to Australian Standards and requirements	
Trades unfamiliar / untrained	Trades and labour unfamiliar with proper installation requirements	
Whole system requirements not used	Often manufacturers installation requirements are not followed impacting warranty and lifespan	



Performance Solution

a method of complying with the Performance requirements set out in the <u>Building Code of</u> <u>Australia</u>, other than by a Deemed-to-Satisfy Solution

Traditional approach - identification and remediation

Reactive – Owners /
Building Managers react
to damage or loss of
amenity

Limited investigational work, often time sensitive, temporary fix

Visual / Cosmetic – What can be seen on the surface



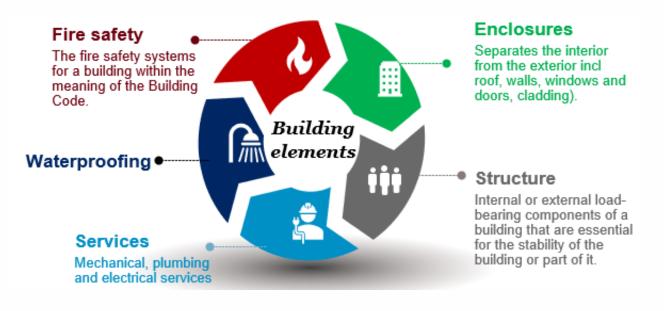
Time Sensitive

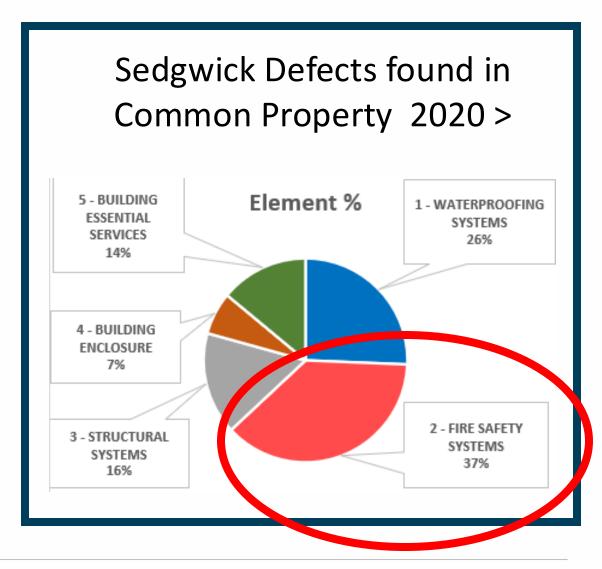
Trades appointed add hoc relevant to the issue

Traditional issues

- ➤ Lack of detailed <u>independent</u> inspection of building at handover or periodic to identify potential issues or pro-active actions
- Lack of proper investigational work by expert to determine cause of defect or failure
- ➤ Lack of <u>independent</u> detailed scope of work to properly guide the remediation
- > Lack of principal contractor to take overall accountability and warranty

What are Building Defect Elements?





Isolated vs Systemic?

One off Issue - Having a bad day



Repeated error in design or installation

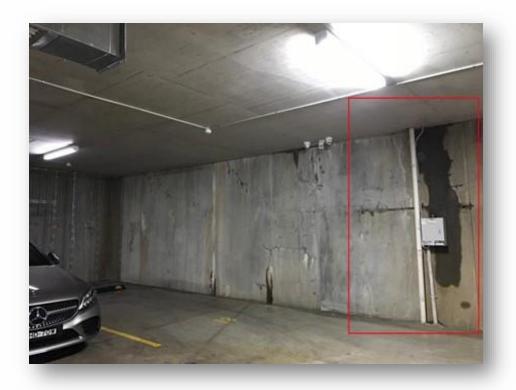


DEFECT TELL-TALE SIGNS

Visible / Obvious Defects

Water Penetration





Visible / Obvious Defects

Water Penetration





DEFECT TELL-TALE SIGNS

Visible / Obvious Defects

Water Ponding or Stains





DEFECT TELL-TALE SIGNS

Visible / Obvious Defects

Cracks / Deformities





Visible / Obvious Defects

Corrosion





Visible / Obvious Defects

Leeching





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DEFECT TELL-TALE SIGNS

Visible / Obvious Defects

Water Ponding or Stains





DEFECT TELL-TALE SIGNS

Visible / Obvious Defects

Cracks / Deformities

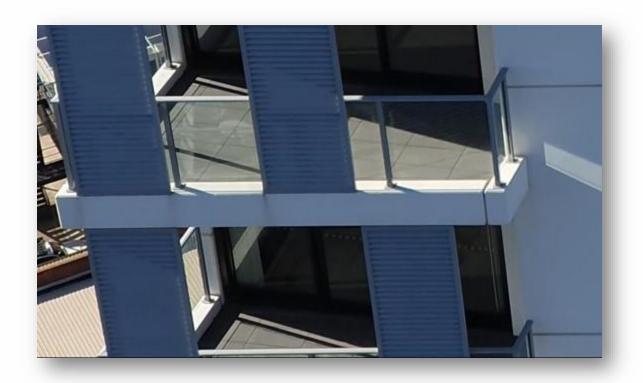




DEFECT TELL TALE SIGNS

Visible / Less Obvious

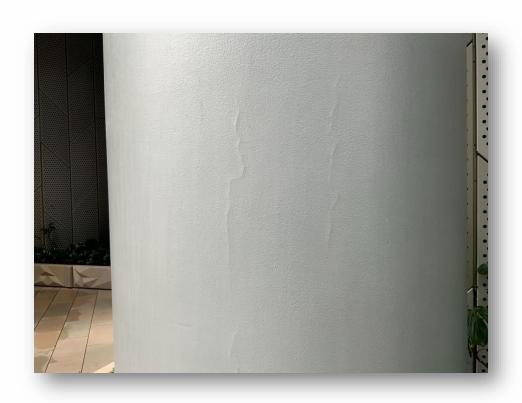
Overflows / Signage





Visible / Less Obvious

Surface Delamination - Dampness / Mould





DEFECT TELL TALE SIGNS

Visible / Less Obvious



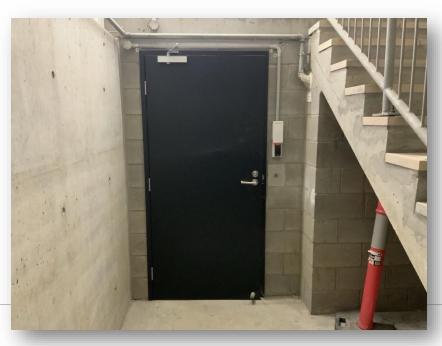
- Mould, External Dampness
- Window / Door operation
- Slow drainage
- Condensation

Passive / Active Fire Issues

Passive Fire Protection = Barrier or Shield to stop spread of fire

Fixed or non active fire protection measures such as

- Fire Walls / ceilings / floors
- Fire Doors
- Penetrations
- Lights
- Signage





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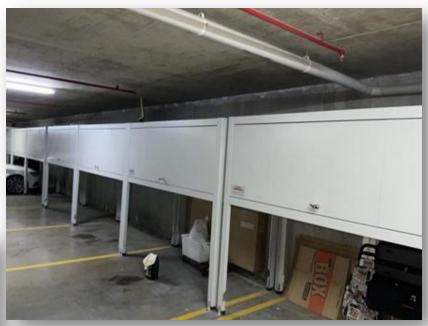


Active Fire Protection = Devices to stop spread of fire

Active fire protection measures such as

- Sprinklers
- Hydrants
- Smoke Detection
- Hose Reels
- Extinguishers





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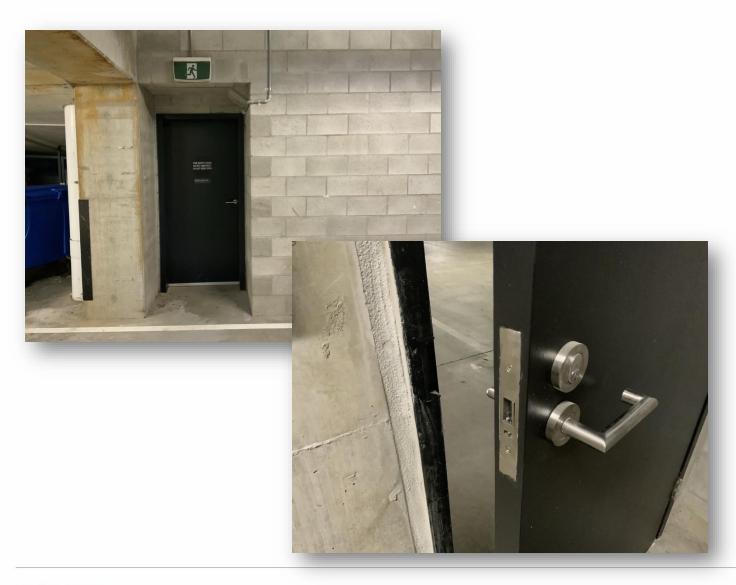


What can owners do?

Walk your escape routes

- Is it visible, lights operating
- Exit signs guiding you the right way
- Doors / locks operating correctly and self closing
- Clear of obstructions

DEFECT TELL TALE SIGNS



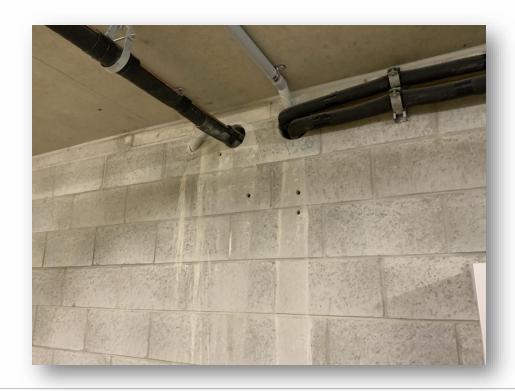
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What can owners do?

Report obstructed sprinklers,
penetrations / holes in walls, floors from new services





When should I raise an issue?

Notify immediately – It could be a collective issue others are experiencing

Early notification =

- Mitigate further damage (insurance requirement)
- ➤ Ability to explore causes prior to escalation
- Reduces the requirement to make time sensitive decisions
- Allows proper planning and forecasting

Consider common areas not just lot property

When should I raise an issue?

Common phrase

"I don't want to investigate as it will cost money and likely result in issues that will also cost to rectify"

Fact – Rectification expenses can quadruple in value when left including

- Further damage and deterioration
 - Impact to other elements
 - Rising industry costs
 - Insurance coverage issues

Early detection can allow preventive measures and proper planning to control and lower costs

What can owners do to be pro-active?

- 1. Ensure a maintenance plan is in place and is being actioned
- 2. Know your building
 - be alert and invested
 - Report any changes or issues
 - Report things that impact the community not just yourself.
 - Simulate situations in the event of an emergency. Would I be safe? Does this seem right?
- 3. Understand your building
 - Plan and forecast routine inspections by experts.
 - Treat expert costs as an investment not an expense
- 4. Avoid quick fixes
 - Ensure isolated defects are investigated properly prior to rectification.
 - Was it systemic? Could it return in other areas?

Learn how Sedgwick can help the strata community navigate their building concerns



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