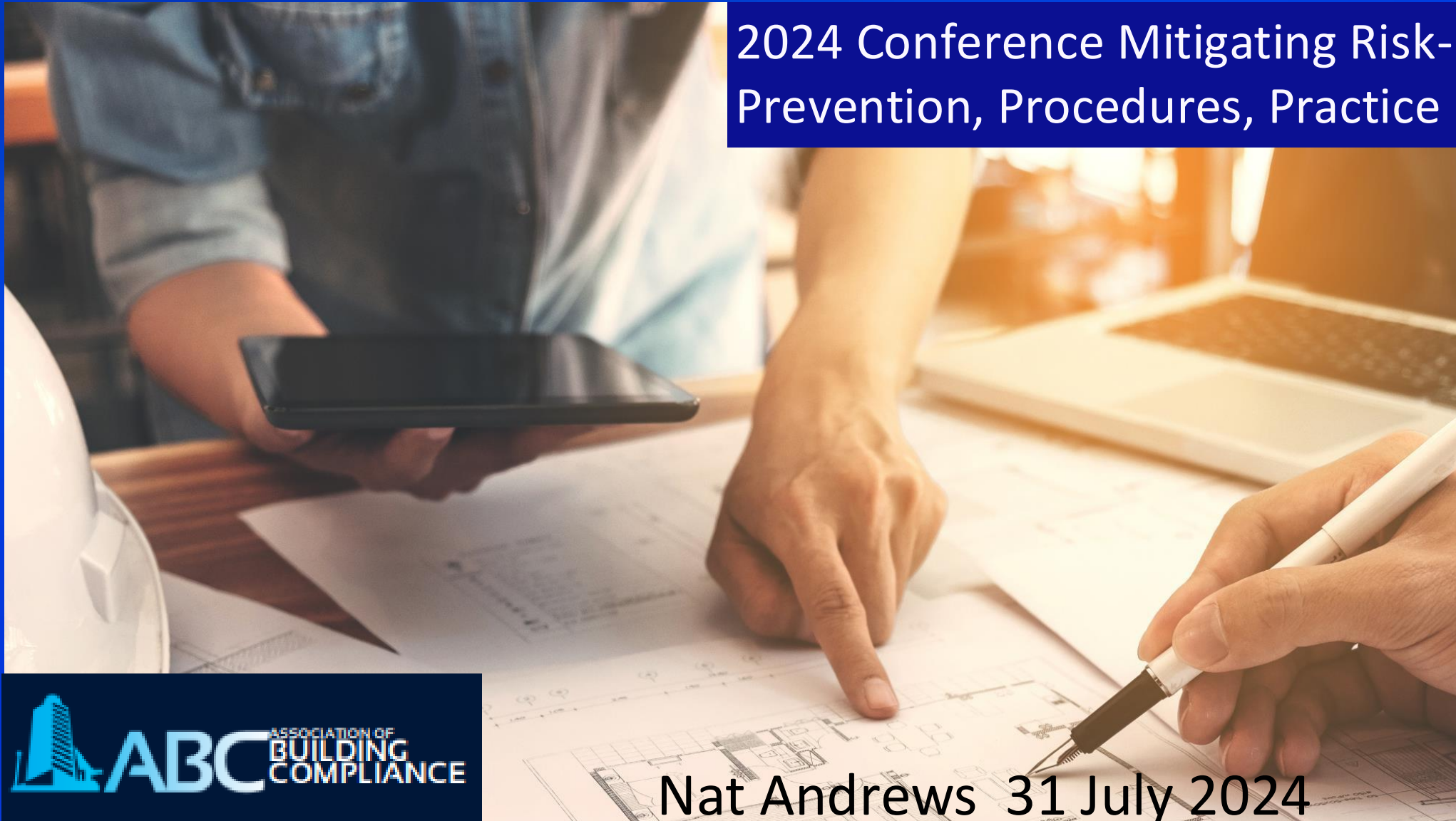


What's the worst that can happen?

2024 Conference Mitigating Risk-
Prevention, Procedures, Practice



RISK ASSESSMENT BY TOM 🐱



Risk Evaluation





Who am I?

I was born in Australia....yes,
another Aussie blow in!

I am a private building surveyor,
consultant and problem solver

I have a few qualifications and over 25 years experience in generally fixing up my own and other's mistakes in the construction industry

I worked in Councils for 20 years and have my own certification and consultancy company Certifiers 2U Pty Ltd

I also advocate for the community and I am currently advising 7 associations and government departments in Australia

Most people know me for my
LinkedIn escapades,
questioning everything and
often getting into trouble for it!

Why am I here?

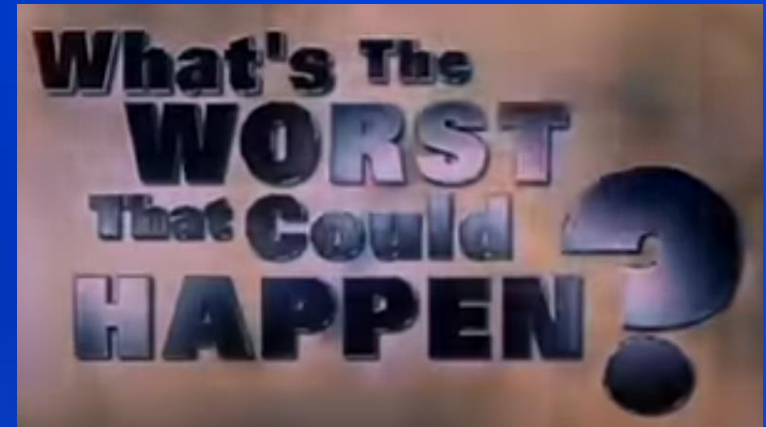
Every person in this room and watching online makes choices that will affect your own life and can affect the lives of thousands of others

I'm here to take you on a journey of a typical construction process and the choices that need to be made

How we make those choices is intertwined with the level of risk we can live with

Outgoing NSW Building Commissioner David Chandler said:

“The standard you are prepared to walk by is the standard you are prepared to accept.”





The Journey

Quiz
Time



What's the worst that can happen?

We are going to do a short quiz. Everyone here and online can join in.

I know you have just been told to turn your phones off – this is your **first risk assessment!**

On your phone or device go to **Kahoot.it**

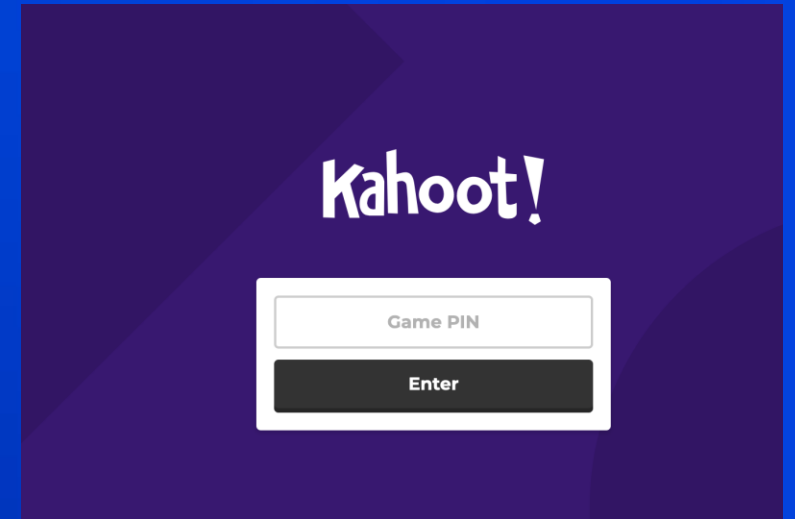
Type in the game pin or use the QR code

Enter your name and then see your name come up on the screen!

There are a series of questions and proposed answers

You will have 90 seconds to answer each one

Let's get started – warning there may be some distressing content but it is necessary for the importance of this discussion.



The results are in. We know who came first second and third.. but what about the rest of you?

Some right and some wrong?
All questions right?
All questions wrong?



LIAR LIAR-PANTS ON FIRE

A high-angle, aerial photograph of a lush green landscape. A paved road winds through the hills, forming a large, sweeping loop. The hills are covered in vibrant green grass, and the lighting suggests a warm, golden hour. In the distance, a small town or village is visible on a valley floor. The overall mood is peaceful and inviting.

Let's continue the Journey...

By exploring those questions a little more...

Question 1 Does the design, materials and product integration comply with the building code?

What's the worst that can happen?

No proper integration

Non-complying products and materials



Does the design, materials and product integration comply with the building code?

✗ There is no time to assess everything.

✗ What does integration mean?

✗ This is a D&C Contract. We do not have any details yet.

✓ All stakeholders have worked together and the design complies.



Correct



What's the worst that can happen?

Lakanal House

6 deaths



VEED



What's the worst that can happen?

Grenfell

72 deaths



VEED

NO FOOD OR DRINK
IS TO BE CONSUMED WITHIN THE
WAREHOUSE

Will NZ follow the same pattern as London
or will
YOU
not let that happen?

Loafers Lodge
6 deaths



Many regulators, some probably here today, want to water down product testing requirements for 'innovation' and 'cost cutting'

Making it easier to build



Posted: 4 April 2024

The Government has announced a package of initiatives that will increase housing supply by reducing barriers, improving competition in the building system and lowering costs.



That will only lead to less safe buildings

PRODUCT TESTING

TEST REPORT

CLIENT :

TEST NUMBER
ISSUE DATE
PRINT DATE
ORDER NUMBER

SAMPLE DESCRIPTION Clients Ref:

Tufted loop
Colour: Lime
Approximate

Material Specification:

Nominal pile composition: 100% Solution Dyed Nylon 6.6
Nominal total pile mass: 475g/m²
Nominal backing: Glasbac backing

ASISO 9239.1-2003
Part 1

Reaction to Fire Tests for Floorings
Determination of the Burning Behaviour
using a Radiant Heat Source

Date of sample arrival:

13/03/2013

Date tested:

05/04/2013

Results:

CHF (Critical Heat Flux / Critical Radiant Flux)

	1	2	3	Mean	
Length	8.4	8.4	8.0	8.3	kW/m ²
Width	8.6	-	-	-	kW/m ²

	1	2	3	Mean	
Length	79	90	95	88	% min
Width	83	-	-	-	% min

Observations: Melting
Blistering

Note: Sample was conditioned in accordance with BS EN 13238-2001 at a temperature of 23+/-2degC and Relative Humidity of 50+/-5% for a minimum of 48 hours prior to testing.

Each specimen was adhered to a substrate of 6mm thick fibre reinforced cement board using Roberts Acrylic 656 adhesive and clamped prior to testing

The test results relate to the behaviour of the test specimens of a product under the particular conditions of the test, they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use



If you look closely enough & study the test reports, you will find many construction products and materials do not comply with national standards



Certificate of Conformity

Certification Body:



SAI GLOBAL

SAI Global Certification Services Pty Limited
(ACN 108 716 669) Operating as "Intertek &
Intertek SAI Global"

JAS-ANZ Accreditation No. Z1440295A5

Certificate number: CM

THIS TO CERTIFY THAT

SUBJECT TO THE FOLLOWING LIMITATIONS AND CONDITIONS AND THE PRODUCT TECHNICAL DATA IN APPENDIX A AND EVALUATION IN APPENDIX B

Limitations and conditions:

1. Installation shall be in accordance with the Technical Brochure [redacted] dated October 2022.
2. For Class 2 to Class 9 buildings, [redacted] cladding system is suitable for only Type C Fire-Resisting Construction when fixed to timber stud framing.
3. For Type A and Type B construction, sarking-type materials must comply with clause C2D10(6)(f) of NCC 2022 BCA Volume One, and the thermal insulation must be non-combustible.
4. For timber and steel frame construction, if the cladding system is not wall cladding system, it is not suitable for use.

Building classification

Volume 1 – Class 2 to

Volume 2 – Class 1 and

SAI Global Certification Services

Date of issue:

Date of expiry:



What do we need to do?

Approvals and compliance

You can have a great overall design, but the devil is in the detail.



Design without integration can lead to this



A scenic landscape photograph showing a paved road that winds through rolling green hills. The sun is low on the horizon, casting a warm, golden light across the scene. The road curves through the hills, and a herd of cattle is visible grazing in a field on the right. The overall mood is peaceful and contemplative.

Are you at a fork in the road?


Question 2 Did you get Authority approval and was the compliance schedule right?

Not getting approval?

Blaming the Territory Authority for your projects?



Not getting compliance schedules right?



Did you get Authority approval and was the compliance schedule right?

✖

I answer to a higher power.

✖

It was close enough. I was just told to get it out the door.

✖

What is a compliance schedule?

✔

It took a long time to determine but we made sure we got it right.

✔

Correct



2.	Smoke Detection Systems	AS 1670.1 - 2004 Automatic Fire Detection and Alarm Systems, C3.5, C3.6, C3.7, C3.8, C3.11, D2.21, G4.8, Spec C3.4, Spec E2.2a, Spec G3.8	AS 1670.1 - 2004
----	-------------------------	---	------------------

What's the worst that can happen?



No ins



Gaol time



Orders and Court

VEED

7.30



Question 3

Have all construction inspections been satisfied before progressing?

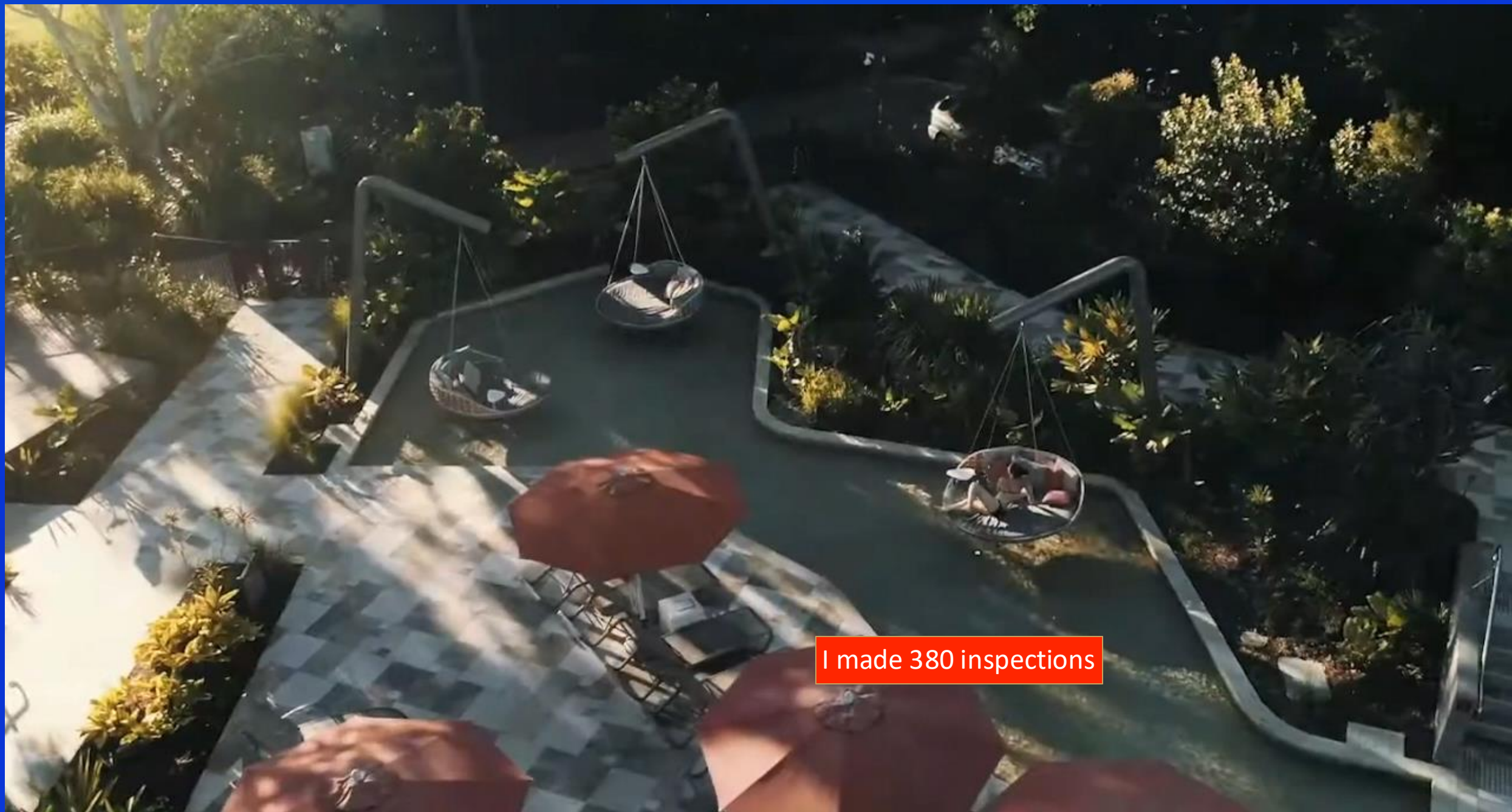


Inspections - More than the minimum

This short promotional video is of a resort I certified in Australia.

The legislated minimum number of inspections required for this resort was 10

How many did I do? There will be a prize for the correct answer!



I made 380 inspections

What do we need to do?

You need control over each project.

How are you picking up issues and changes during construction?

You need to develop minimum standards for the number and type of inspections you do.

Take photos of everything. I take at least 50 photos per inspection

If you are saying you do not have time, put your prices up. You need resources to do your job properly.

What's the worst that can happen?



What do we need to do?

Question 4 Was all commissioning done at the final inspection?

Commissioning and final inspection ✓

Has a pre-final inspection been undertaken? If not, why not? ✓

Are you just collecting certificates hoping everything will be okay? ✓

Are you performing a full system witness test? If not, why not? ✓

Are you reading the certificates, ensuring they comply and are ground truthing them? ✓

Do you wait for the inspector to tell you what they want? ✓

Or do you anticipate what they will need and get it done?

Are you calling in experts? I do ✓

I am not an engineer or a plumber

Is the building ready to be occupied? ✓



Was all commissioning done at the final inspection?

✗ What final inspection? I already got paid. I'm on the next job.

✗ We told the inspector we fixed the issues but we didn't.

✓ Commissioning completed. A few issues resolved. Final was satisfactory.

✗ Who cares? The IQP will pick up any issues later.

Correct



What's the worst that can happen?



Are YOU walking by these?

What's the worst that can happen?



A scenic landscape photograph showing a paved road that winds through rolling green hills. The sun is low on the horizon, casting a warm, golden light across the scene. The hills are covered in lush green grass, and some small trees or shrubs are scattered throughout. The road is bordered by a simple wooden fence. The overall mood is peaceful and nostalgic.

Stay on the road with me...
we are nearly home

Question 5 Should a Building

Warrant of Fitness (BWof) be issued?

What do we need to do?

Crunch time!

Have you checked the entire process?



Did you review the developer, builder, design documents, products, materials, compliance schedule, building codes, national standards, documentation and certification at the time of construction, consent authority approvals, inspection results, undiagnosed performance solutions, commissioning tests?



Are you inspecting the building to see if it is constructed as per the approved plan, any changes made, access and egress issues, fire service locations and the big one....



Should the building have been signed off in the first place?

Lack of resources? Put your prices up.

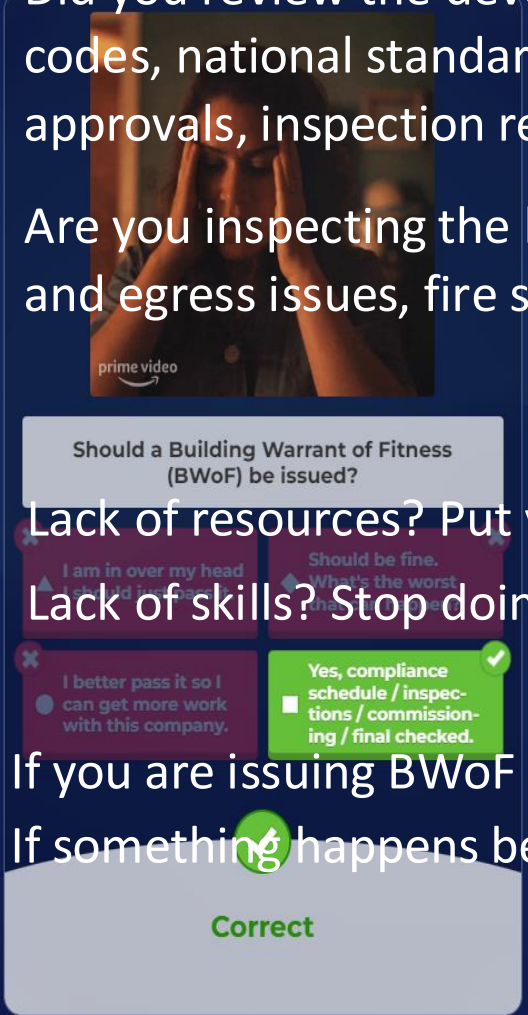


Lack of skills? Stop doing this alone and work under someone competent.

If you are issuing BWof certificates without doing this investigation, you are not doing your job properly.



If something happens because of your 'oversight' or 'negligence'; you could be held personally liable.



What do we need to do?

Question 6 Does the building meet the authority's audit?

Engage with the auditor. IQPs and auditing authorities need to work together more

is not acceptable

know more than the auditor

ensive checks

ted

ced

rocess is as important as each part of

should teach us all



Stop this us and them mentality. You are all here to help the community

VEED

A CURRENT
AFFAIR

GOLD COAST

The end of the road

Everyone in this process is crucial to ensuring buildings are safe to occupy

Everyone has a moral, ethical, personal, financial and professional responsibility to get this right

Think about your children, your neighbour's children

We have assessed risks, we know what we need to do, let us get out there and do it!

YOU can make a positive difference!

Don't be the one who finds out the worst that can happen!

The background of the slide is a blue-tinted photograph of a classroom. Several students are visible, with their hands raised in the air, suggesting an interactive session or a Q&A period. The focus is on the hands and the general atmosphere of the room, with the students' faces slightly blurred.

Nat Andrews
Certifiers 2U
office@certifiers2u.com.au
+61266805424
+612408869818

Thank you

Questions?

Image credits:
iStock, Kahoot!, Unsplash, Bing
images, C2U archives.