## A CERTIFIERS PERSPECTIVE

Super high rise buildings and podium construction BCA compliance and the approach to performance based design

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#### Role of the Certifier

#### Statutory:

- ▶ Need to be a "gate keeper"
- ▶ To act in the interests of the public at all times and not the applicant
- Not to be involved in the design outside of DTS compliance (conflict of interest)
- Achieve compliance with the BCA (more than just Parts C, D & E)

#### Functional:

- Must rely upon the input of many professionals
- Heavy reliance upon design/install certification
- ▶ Knowledge is an inch deep but a mile wide
- Issue of development certificates usually interpreted as meaning every component of the design has been reviewed and assessed as achieving compliance
- Competent versus accredited



## DTS versus performance in legislation

- Authority having jurisdiction and the role to approve alternate solutions embedded in the Act/Regs
- Must assess an application for a development certificate where alternate solutions are proposed - open mind required
- Not demonstrating compliance with the BCA is grounds to refuse to issue a development certificate
- Refusal to issue a development certificate can be appealed to the Courts, effect would be to have the Court rule on the suitability of the alternate solution (never happen).
- What happens next if certifier refuses to accept the alternate solution?

## Barriers to alternate solution approval

- Variations in the approach taken by fire safety engineers
- Promotion of alternate solutions that are "reasonable" (selling dreams?)
- Certifiers not willing to exercise their own professional judgement
- Referrals to FRNSW and certifiers unwillingness to act contrary to their comments, eg sprinklers to podium towers
- ▶ 10 year liability to the certifier's PI insurance and litigious nature of construction can push a conservative position (real or imagined)
- Concern about the ability to correctly implement an alternate solution to the built form of the building
- Already complex legislation associated with certifiers role often results in unwillingness to want to be involved with performance based design
- No "out clause", eg no way to moderate disputes, certifiers decision becomes final word. "Just make it DTS"

## Alternate solutions by design or default

- Most building designs are majority DTS
- ▶ Use of performance requirements easier than re-writing the DTS clauses that need to be, eg height of fire control centre max 300mm
- Podium design with complex exit design with stairs not connecting directly to street level, architectural design driving non compliance
- Usually mixed classification buildings and have competing mechanical services
- Alternate solutions tend to revolve around the functionality of the building, eg smoke detection and occupant warning systems configured so as not to result in one out all out scenarios as opposed to first principles analysis
- ▶ The next big issue! (eg combustible facades)
- Alternate solutions already accepted as effectively DTS:
  - Extended travel distances
  - Number of exits in podium towers under 25m
  - Booster locations
  - Occupant warning to not have one out all out

#### Development and implementation

- Need to have the architectural fraternity understand the ability to step outside of the DTS controls
- ► FER needs to be unambiguous (K.I.S.S)
- Design consultants/engineers not fully understanding the FER
- Sub contractors not being aware of the FER (only working of design documents)
- ▶ Alterations to buildings the subject of alternate solutions, often occur during the construction of the base building itself and then post occupation
- Annual certification of complex alternate solutions. Is annually sufficient? Who undertakes the maintenance and certification?

#### Ways forward

- Introduction of design review committee. Industry based with ability to provide legal protection to a certifier
- ▶ Re-word the conflict of interest provisions to enable certifiers to have direct input to design development
- Part 4a Compliance certificates (fire engineers, design consultants, installation contractors)
- Involvement of FRNSW as approval authority (Heights of Buildings Act)
- Specialist A1 class certifiers for complex building types
- Code compliance. DTS performance assessment and impact on alternate solutions

# Thank you

Questions

