

# FIRE UPGRADES OF EXISTING BUILDINGS

Voluntary and forced upgrades of existing buildings - interaction between regulatory authorities and the mechanisms of approval.

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# Voluntary upgrades

Building owner initiates upgrades due to:

- ▶ Duty of care to occupants
- ▶ Risk analysis on larger commercial buildings
- ▶ Risk reduction for potential loss of productivity post fire event
- ▶ Insurance implications
- ▶ Past occurrences of interactions with Council or other Authorities

# Forced upgrades

- ▶ Initiated by Council or FRNSW
- ▶ Usually based from complaint passed onto the Authority (reactive)
- ▶ Fire safety order (section 121B of the EP&A Act, order #6)
- ▶ Where under an order can be prosecuted if not complied with
- ▶ Order terms can often be negotiated
- ▶ Not subject to a development consent or construction certificate
- ▶ Council may exercise discretion as to the extent of upgrade

# Mechanisms of acceptance - Voluntary

- ▶ Can often be undertaken as complying development (CDC)
- ▶ Where it is a CDC no Council involvement (preferable?)
- ▶ CDC does not require FRNSW referral at the assessment stage (may require request for final inspection if affecting class 2 or 3 buildings where impacting “relevant fire safety system”)
- ▶ Must be prepared as a fire engineering report
- ▶ The CDC approves the physical building works only, eg a CDC can not be issued to adopt a FER that justifies levels of safety to a built form or use.
- ▶ Will most likely involve a BCA consultant and an accredited certifier (conflict of interest) and fire engineer. Need for consistency in approach between each.
- ▶ Not possible to heritage listed buildings
- ▶ Can approach Council for issue of an order

# Forced upgrades - Order #6

- ▶ Issued by Council - principally to relate to *“To do or refrain from doing such things as are specified in the order so as to ensure or promote adequate fire safety or fire safety awareness”*
- ▶ Can be used to adopt fire safety strategies, eg report based on probabilistic analysis where no physical works required
- ▶ Includes notice period where the terms of the order may be discussed
- ▶ Often notice issued with no works required and imposes to the recipient to provide a report identifying recommended upgrades
- ▶ Competency of the Council fire safety officers - variable
- ▶ Council has the ability to exercise discretion, order #6 does not refer to the BCA in any way.
- ▶ Issue of order does not need separate DA/CC/OC
- ▶ Orders issued with time period for compliance
- ▶ Enforced through the court, can result in further order #10 to vacate the premises

# Working together? An integrated approach

- ▶ When undertaken as a CDC the certifier becomes the authority having jurisdiction
- ▶ Council involvement - difficulty with varying degree of staff experience across Council areas often slows process or creates higher levels of conservatism
- ▶ Convincing Council they are able to use discretion when utilising fire orders
- ▶ Fire orders remove planning controls and permit works to commence immediately (benefit to client and occupants)
- ▶ Often no holistic BCA assessment report, scope usually figured out on site and therefore needs fire engineer to be “hands on”
- ▶ When does FRNSW get involved?
  - ▶ Council request based of type of building (level of risk)
  - ▶ When impacting fire safety systems (hydrants)
  - ▶ If complaint originated to FRNSW

# Case study (ongoing) - hotel accommodation

- ▶ Three storey hotel (partial basement level). Class 6 ground floor, class 3 first floor. Type A construction
- ▶ Principal issue being extended travel distances to single non fire isolated exit up to 20m
- ▶ Heritage listed building
- ▶ Council commenced upgrade. No order issued, no direction given as to what needs to be upgraded
- ▶ Site inspection undertaken between client, BCA consultant, fire engineer to identify risks and opportunities to resolve
- ▶ Short form upgrade strategy prepared to get Council on board (limit costs to client until authority gave in principal support)
- ▶ Required multiple meetings with several officers before the short form strategy was agreed (verbally only)

# Accommodation level:

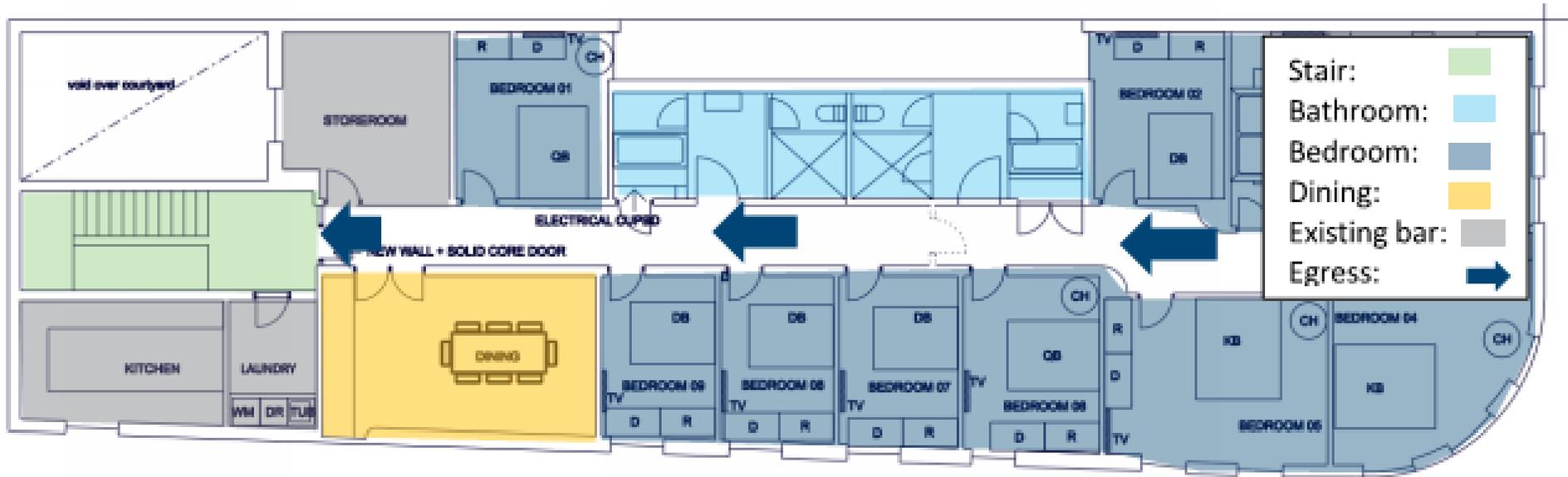


Figure 2.3: First Floor (L1)- Floor Plan

# Upgrade strategy

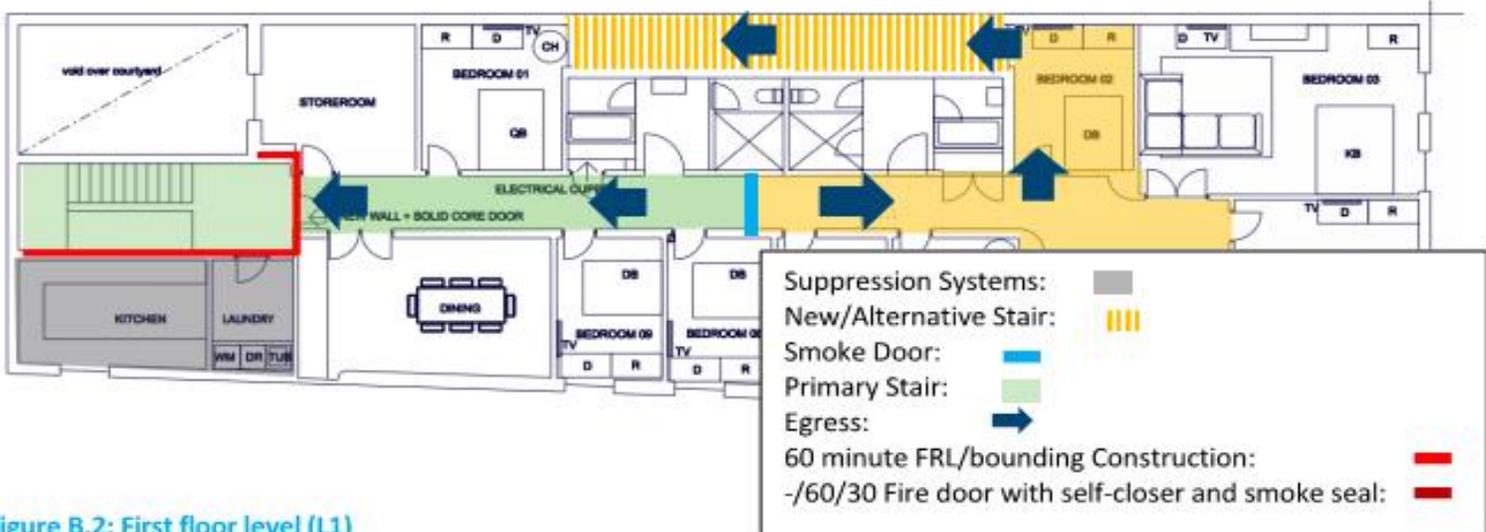


Figure B.2: First floor level (L1)

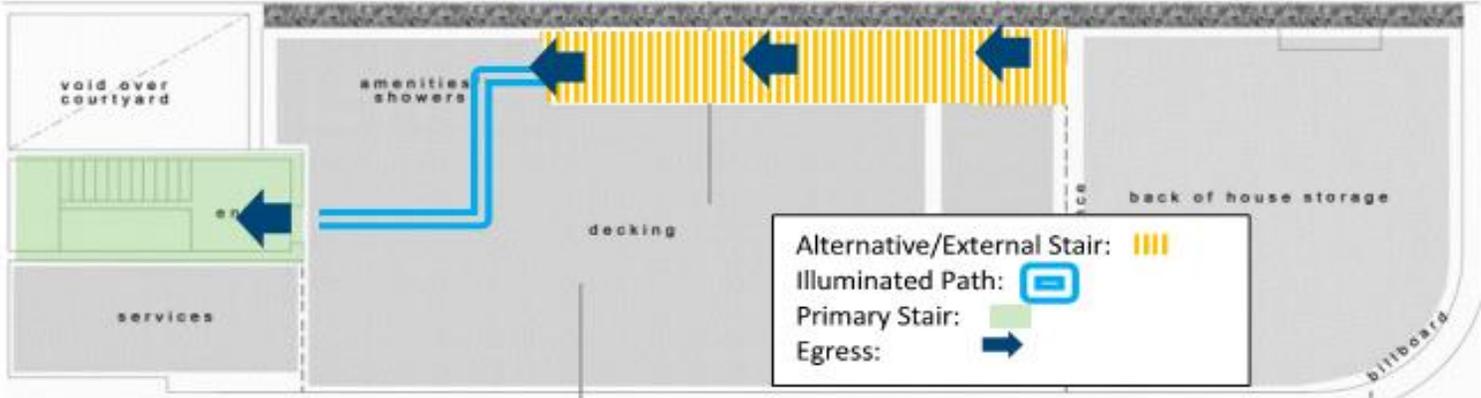


Figure B.3: Open Roof top Level (L2)

# Challenges and benefits of approach

## Challenges:

- ▶ Dealing with multiple Council officers. Needing to get to senior staff in decision making positions time consuming and required client intervention.
- ▶ Aligning the clients expectations to that of the consultant team
- ▶ Fire safety officer undertook the internal discussions with heritage section

## Benefits:

- ▶ Heritage building - enabled the works to be undertaken without needing a DA/CC.
- ▶ Gave flexibility as to when works could be undertaken
- ▶ Enabled to use of non compliant stair without needing to separately address that as a non compliance
- ▶ Suitable level of life safety being obtained
- ▶ Cost - fire order is free from Council

# Case Study (ongoing) - apartment building

- ▶ Existing four storey apartment building
- ▶ Upgrade as a result of compliance audit initiated by the Body Corporate
- ▶ To be undertaken as complying development
- ▶ Compliance matters principally relate to exit configurations and fire hydrant design
- ▶ Scope of non compliances resolved between the BCA consultant and fire engineer prior to certifier involvement
- ▶ Conflict of interest provisions preclude the certifier directing the approach to be taken, role is to certify the proposed works only.

# Challenges and benefits of approach

## Challenges:

- ▶ Ensuring that roles of the parties are understood. Client believes certifier takes over BCA consultants role
- ▶ Works must fit within controls of complying development, may require alternate approaches that are not preferred
- ▶ Fire hydrant works require request for FRNSW inspection at completion

## Benefits:

- ▶ Single decision maker
- ▶ Certification process is more familiar to parties (BC like getting OC's)
- ▶ Time - CDC can be issued in a day

Thank you

Questions?