



Comhairle Contae Thiobraid Árann
Tipperary County Council



Fire Officers Perspective Reuse of Vacant Buildings

“Reigniting Town Centre Living”

IBCI – Annual Conference

4th and 5th March 2026

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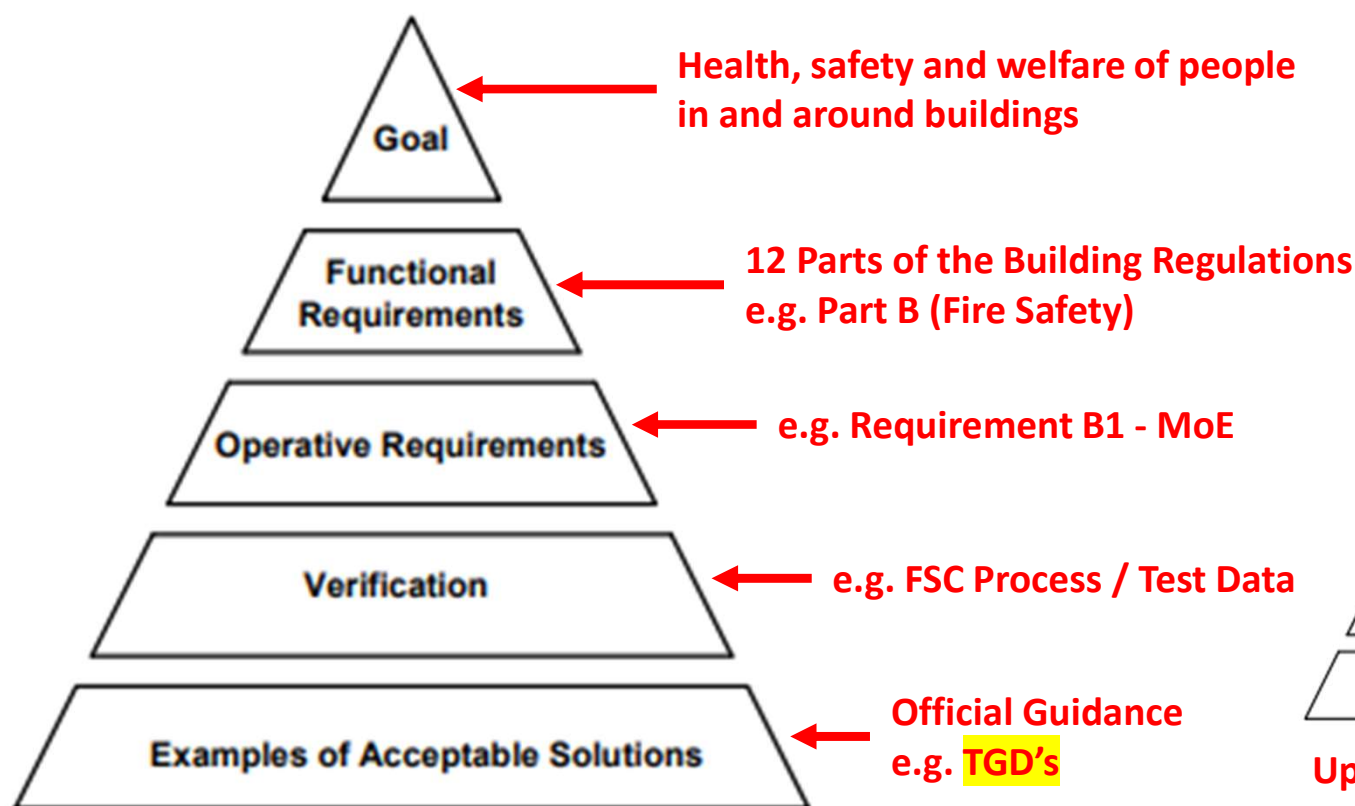
Why a Fire Officers Perspective?

- **Fire Services offer a variety of work – most FO's will have experience in some or all of the following area's**
 - Fire Operations (RSFO duties, operational SFO's),
 - Fire Safety / Prevention (FSC's, Fire Services Acts, Community Fire Safety)
 - **Building Control**
 - Fire Training (Instructing and Command),
 - Major Emergency Management (Hazard Identification, Risk Mitigation)
- **Element of “thinking on your feet” and making effective decisions – particularly for RSFO role**
 - Application for this mindset within the Building Regulatory Environment



Performance-Based Building Regulations and Existing Buildings

- 1970's – change in thought process around prescriptive approach to regulations



NKB Model (NKB, 1976)



Updated Model – IRCC / Brian J. Meacham



TGD's - Existing Buildings

- TGD's adoption (without modification) may not always be appropriate for re-use
- Accept that “prima facie” compliance may not be possible or practicable

Existing Buildings

In the case of material alterations or changes of use of existing buildings, the adoption without modification of the guidance in this document may not, in all circumstances, be appropriate. In particular, the adherence to guidance — including codes, standards or technical specifications — intended for application to new work may be unduly restrictive or impracticable. Buildings of architectural or historical interest are especially likely to give rise to such circumstances. In these situations, alternative approaches based on the principles contained in the document may be more relevant and should be considered.

- **Professional Judgement** required



An Roinn Tithíochta,
Rialtais Áitiúil agus Oidhreacht
Department of Housing,
Local Government and Heritage

Information Note on Alternative Approaches to Demonstrate Compliance with the Building Regulations

March 2024

<https://www.gov.ie/en/department-of-housing-local-government-and-heritage/publications/alternative-approaches-to-demonstrate-compliance-with-the-building-regulations/>



Back to Research....



Reigniting Town Centre Living

An evaluation of the fire safety aspects of re-using vacant “above-the-shop” residential accommodation in Irish towns and urban centres.

By Martin Moore

Dissertation submitted to
Department of Architecture and the Built Environment
South East Technological University

In partial fulfilment of the requirement for
the Degree of Master of Science
in Building Regulatory Compliance

August 2025

<https://www.setu.ie/courses/msc-in-building-regulatory-compliance-pt>

- MSc – Building Regulatory Compliance

Are fire safety provisions a significant obstacle to VATSU reuse?



What's a VATSU?

- VATSU – Vacant Above the Shop Unit(s)





Key Fire Requirements with Re-use

- Requirement B1 – Means of warning and escape
- Requirement B3 – Internal fire spread (structure)



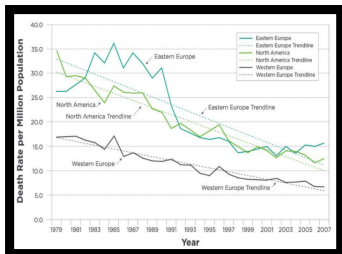


Research Findings



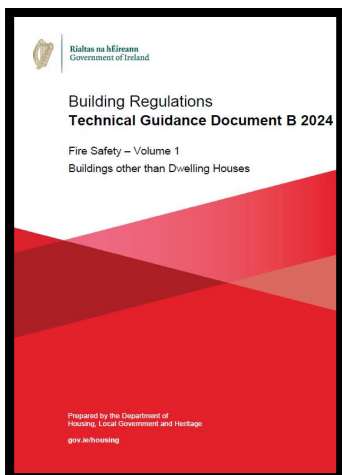
• **Fire Safety Regulatory Frameworks for Buildings in Europe**

- Outside of the Eurocodes there is no consensus in Europe on fire safety provisions in buildings – particularly for means of escape provisions,
- Differing laws overseen by differing regulators (national, regional and local by-laws)
- Many countries like Ireland adopt non-prescriptive performance based fire safety regulations. “adequate” - allows flexibility but unhelpful without some form of prescriptive guidance



• **Fire Statistics in Europe**

- No central reporting format nor accurate statistics
- Living arrangements play a significant role in preventing fire fatalities (multi-generational living shown to reduce fire fatalities amongst elderly)



• **Approaches to Fire Safety in Existing Buildings**

- Prescriptive codes do not serve existing buildings well due to “peculiarities” encountered,
- Performance-based regulations favourable for building reuse. Yet, obtaining consensus between designer and regulator is difficult when utilising a performance based approach.



Research Findings

- ***Fire Safety Regulatory Framework***

Fire Services Acts 1981 & 2003

- not determined to be a barrier to VATSU reuse
 - “reasonable measures”
 - Useful guides published throughout the years (i.e. Fire Safety in Flats 1994)

Building Control Act 1990 (as amended)

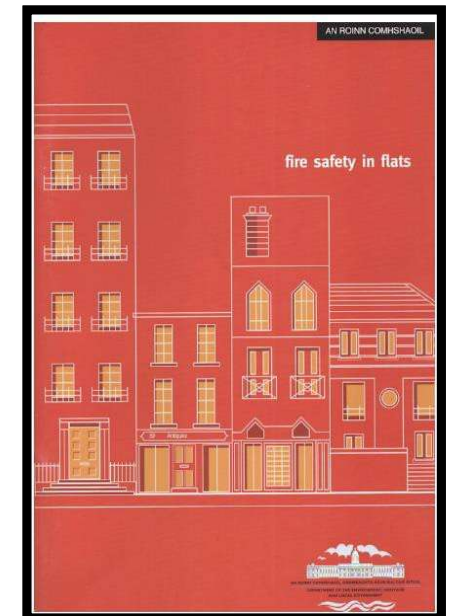
- interpretations of “new / greater contravention” has significant repercussions for VATSU reuse, along with interpretations of “change of use”
 - What is a new / greater contravention? Adequately defined?
 - Is a change from one flat to multiple flats a greater contravention if using existing timber stairs with winders? (is it adequate for escape?)
 - Building Control Act Definition of MCoU versus Building Control Regulations Definition



Research Findings

• ***Prescriptive Guidance Available - Fire Safety in Flats 1994*** - Assists with compliance with the Fire Services Acts 1981 & 2003.

- **Introduction on MoE** - “A *fire in a flat may develop to a stage where the occupants of other flats, in the same building, will be affected*. It is therefore necessary to provide facilities to protect the escape routes of all occupants of the building....”
- Can be utilised for material alterations of existing elements (if VATSU is pre 1st June 1992),
- Recommendations are not mandatory – “*not a substitute for professional judgement and common sense*”,
- Provisions applied to buildings based upon storey heights (not meters),
- Lobby protection not required up to 3 storeys (maximum of 4 flats / storey)
- Larger escape windows required,
- No reference to compartmentation – fire resistance only,





Research Findings

•Prescriptive Guidance Available – TGD B – 1991 to 2024

•TGD B closely followed UK's Approved Document B -

Simultaneous
Evacuation

•Yet no account taken of differing evacuation strategies for flats in Ireland (simultaneous evacuation)

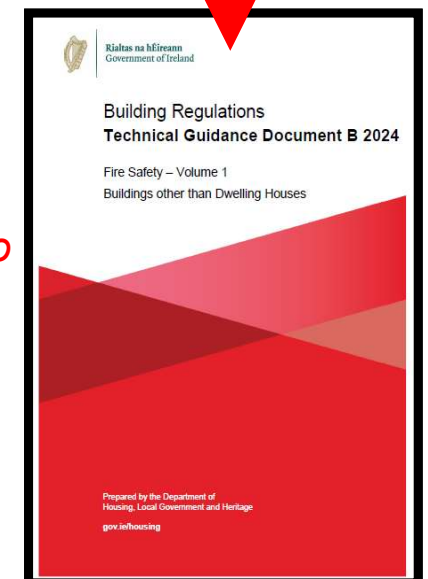
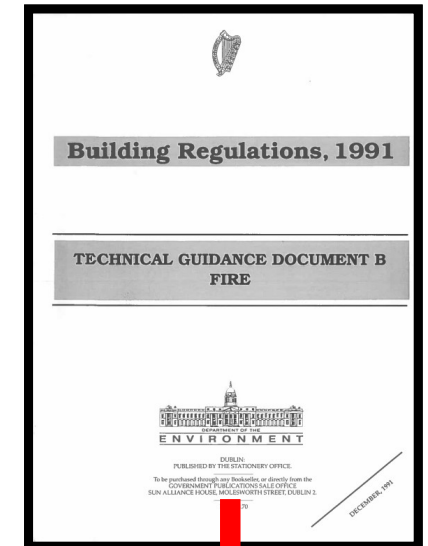
•**TGD B** – “*fire spread beyond the immediate vicinity of outbreak should not occur... “...simultaneous evacuation of flats in the event of fire is the default position”*”

•**BS 5588:1** – fire in a flat “*should present little or no risk to the occupants of other dwellings if they remain within their own dwelling as it will not break out of the dwelling of origin for some considerable time (during which, no doubt, the fire service will deal with the fire).*”

•**ADB** - “*measures in Section 8 (B3) provide a high degree of compartmentation and therefore a low probability of fire spread beyond the dwelling of origin, so that simultaneous evacuation of the building is unlikely to be necessary...*”

•**BS 9991** - *the flat or maisonette has a high degree of compartmentation and therefore there is a negligible risk of fire spread beyond the flat or maisonette of origin by either internal or external means, so in most fires simultaneous evacuation of the building is unlikely to be necessary;*

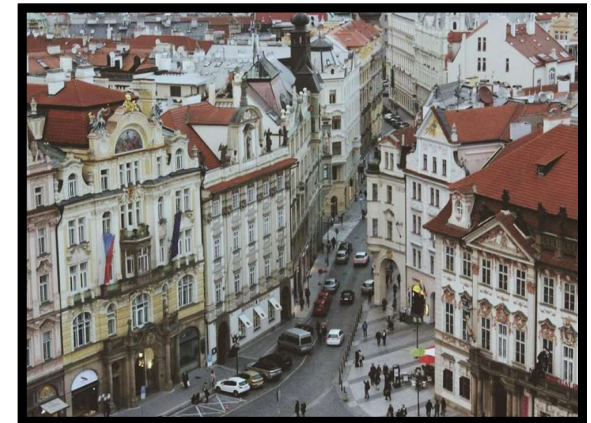
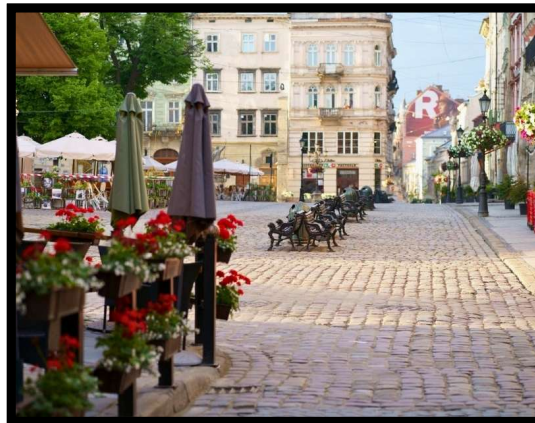
“Stay-Put” Strategy





Research Findings

- **European Fire Safety Provisions – Mixed-User Buildings** (how can they do it???)
- France, Netherlands, Germany, Austria, Sweden, Belgium
 - Means of escape – huge differences between countries
 - Structural fire resistance – similarities found (30 mins REI typically deployed)



Research Findings

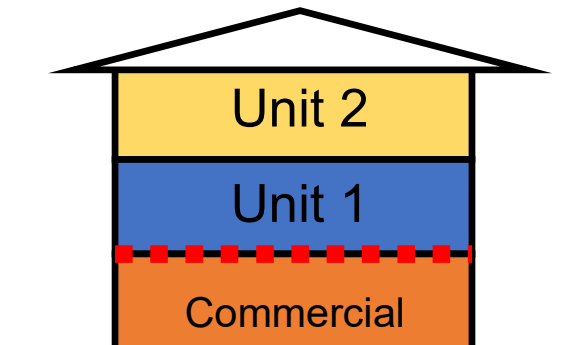
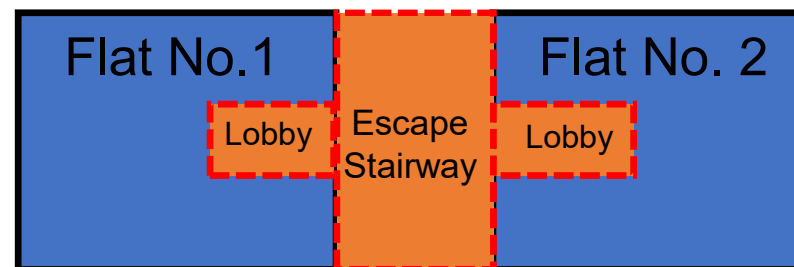
- **European Fire Safety Provisions – Mixed-User Buildings**

- **Key Means of Escape Provisions (B1):**

- Fire service intervention utilised as a second means of escape in some countries
- Lobbies not required to single stairways with limited dwellings
- No limitation on travel distances within flats (flat entrance to stairway limited)

- **Key Fire Resistance Provisions (B3):**

- Compartmentation is not required between flats,
- Residential and commercial uses need not be compartmented for small buildings





Research Findings

- **Survey Findings**

- ***European Fire Officers Survey***

- Officers indicated robust construction in mixed user town centre buildings - concrete and masonry
- Unusual for historic town centre locations?



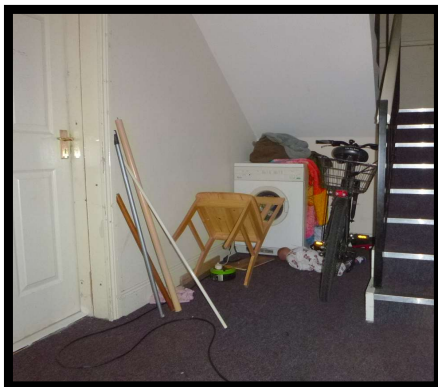


Research Findings

• Survey Findings

• *European Fire Officers Survey*

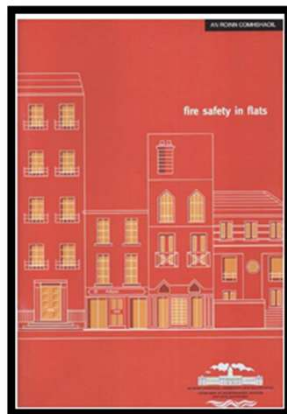
- Fire service oversight and enforcement of this building stock varies throughout Europe,
- Smaller scale developments are not regulated to the same extent found in Ireland
- Majority of European Fire Officers did not see mixed-user buildings as a significant fire risk – fire fatalities rarely occur in this building stock. However, there are fire safety deficiencies noted....





Research Findings

- **Findings from Irish Fire Officers Surveyed**
 - Predominantly felt existing guidance doesn't adequately deal with re-use,
 - Would welcome a revision to Fire Safety in Flats 1994 document,
 - Would welcome additional guidance on application of compensatory measures,
 - Not in favour of risk-based approach to re-use (fire safety assessment process) – FSC process should remain,
 - Adequate life safety systems (FDAS) were FO's main priority, however concerns raised over maintenance of such systems in flats.

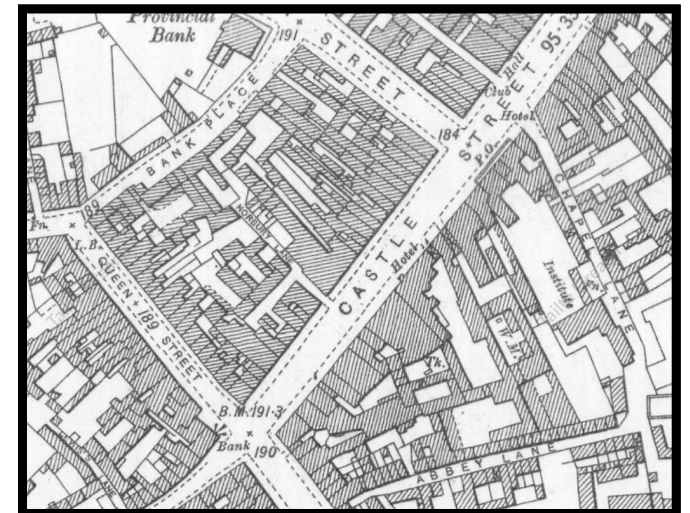
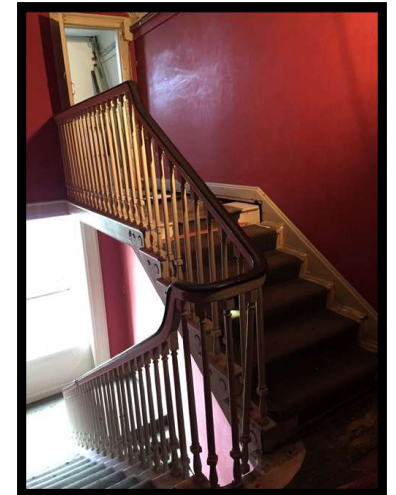




Research Findings

• Interview Findings – Fire Safety Consultants

- Common characteristics of all VATSU's:
 - Single escape stairway,
 - Location of stairway unsuitable,
 - Narrow escape widths,
 - No active fire safety systems or poorly maintained,
 - No compartmentation with commercial unit,
 - Escape stairway not protected to roof,
 - Lack of fire resistance / firestopping
 - Services located within walls / floors that would need to be compartment walls / floors





Research Findings

• Interview Findings – Fire Safety Consultants

- Interviews found similar themes among Fire Safety Consultants:
 - Reduced risk tolerance since BCaR and Grenfell – more reliant on official guidance documents,
 - Use of professional judgment leaves them feeling exposed in a world of increasing PI Insurance,
 - Peculiarities found in VATSU's require more effort and time to develop solutions over new builds where prescriptive codes fit.

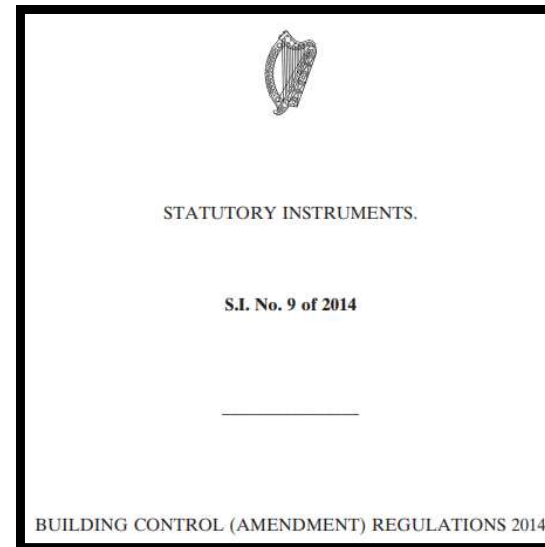




Research Findings

• Interview Findings – Fire Safety Consultants

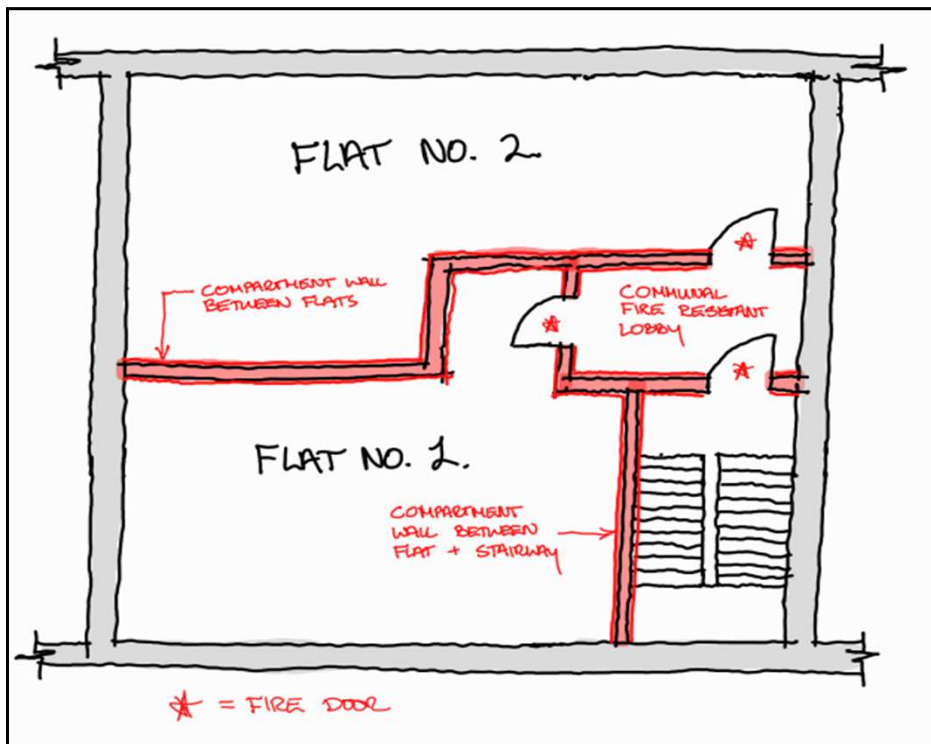
- Interviews found similar themes among Fire Safety Consultants:
 - Huge misconceptions among building owners and designers about the viability of their property from a fire safety perspective
 - Majority of consultants prefer BCaR and FSC process over a Risk Based Approach



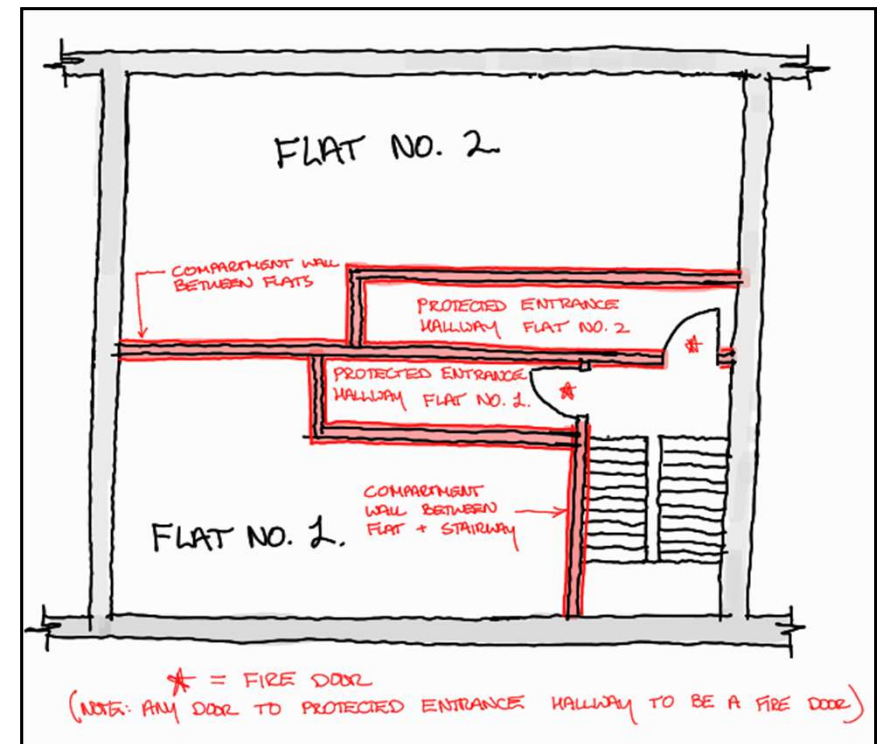


Research Findings

- Interview Findings – Fire Safety Consultants
 - Fire Safety Challenges Encountered:
 - Lobby Protection to single escape stairway,



Common Lobby to Stairway

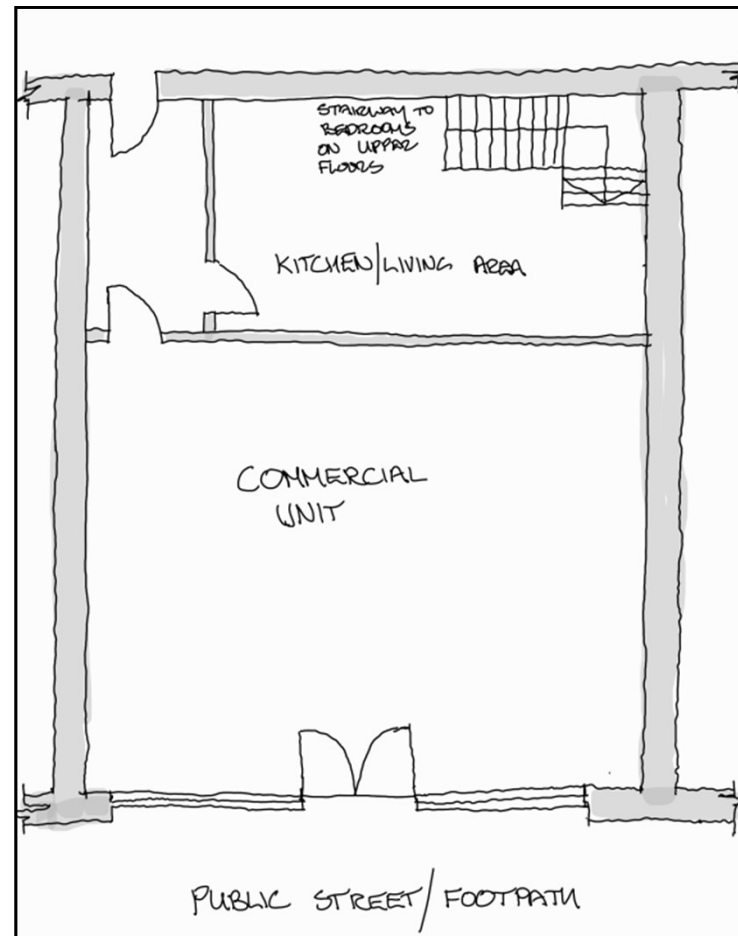


Protected Entrance Hallways



Research Findings

- **Interview Findings – Fire Safety Consultants**
 - Fire Safety Challenges Encountered:
 - Location of stairway,

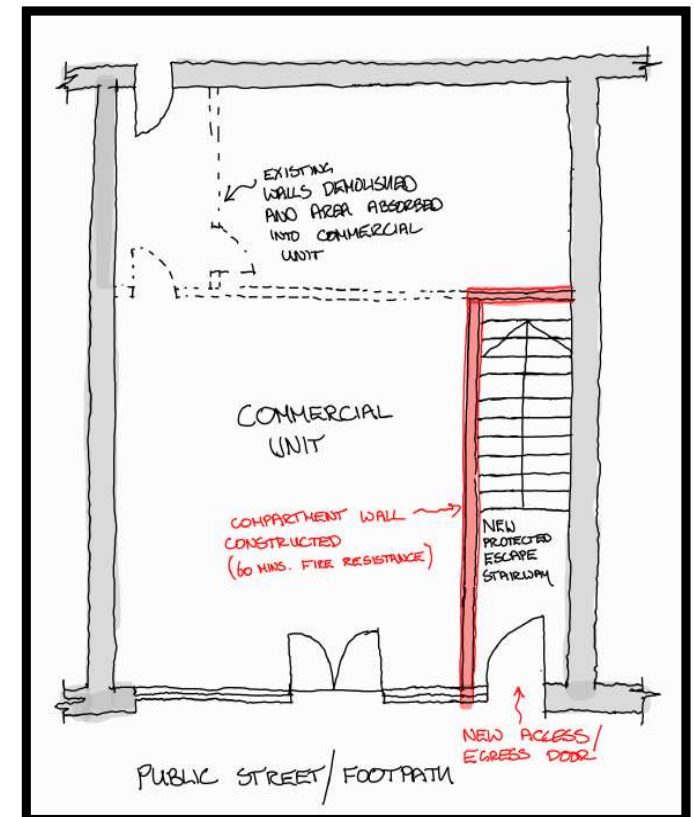
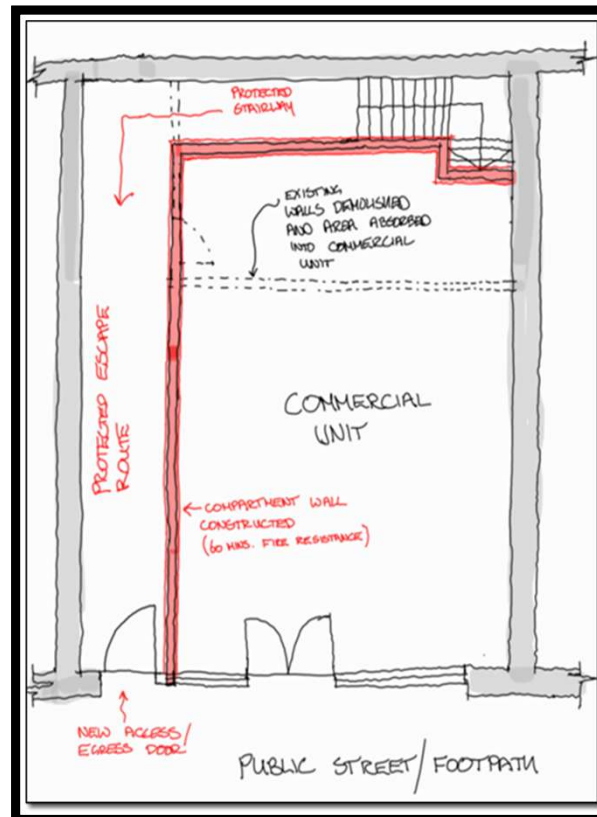
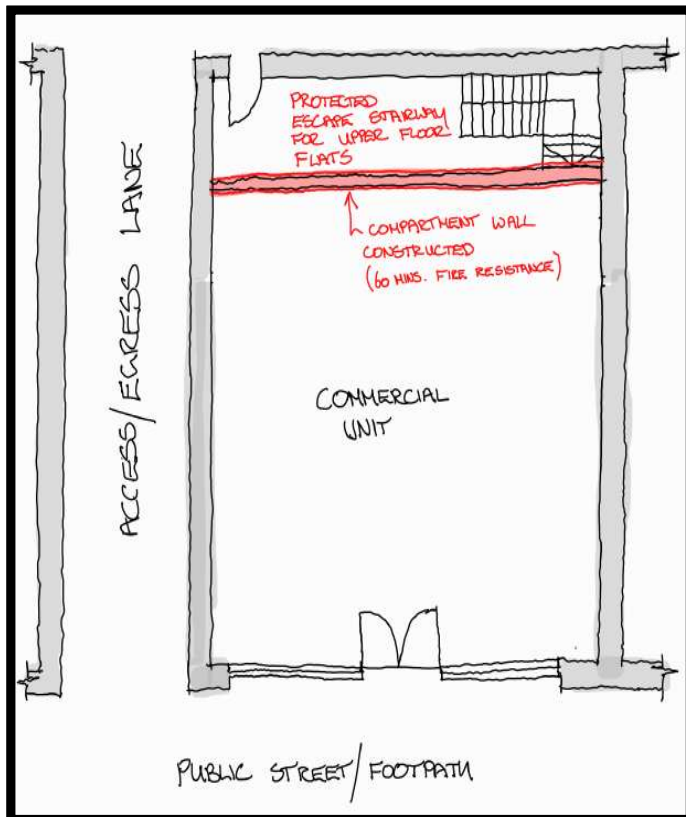




Research Findings

• Fire Safety Challenges Encountered

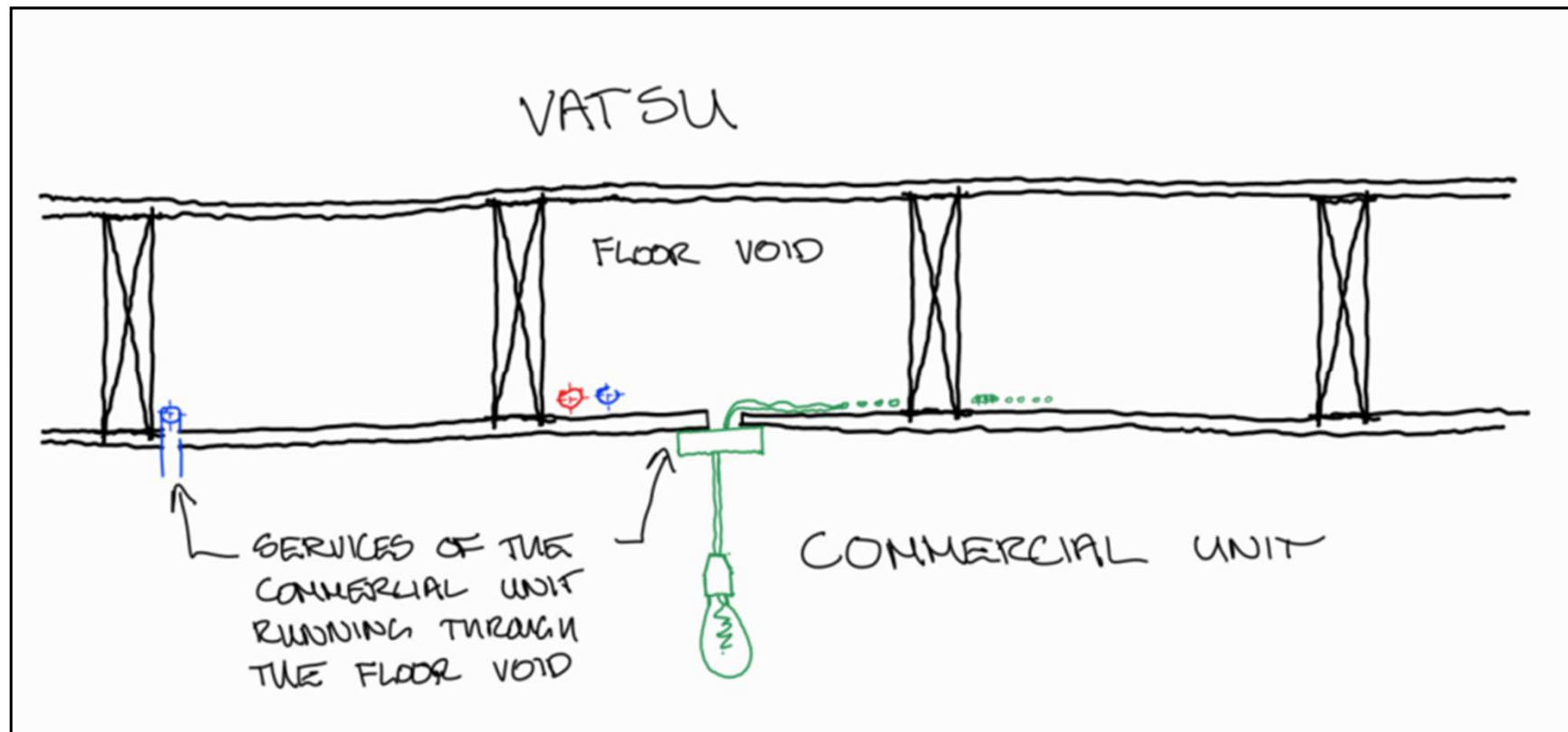
- Location of existing stairway,





Research Findings

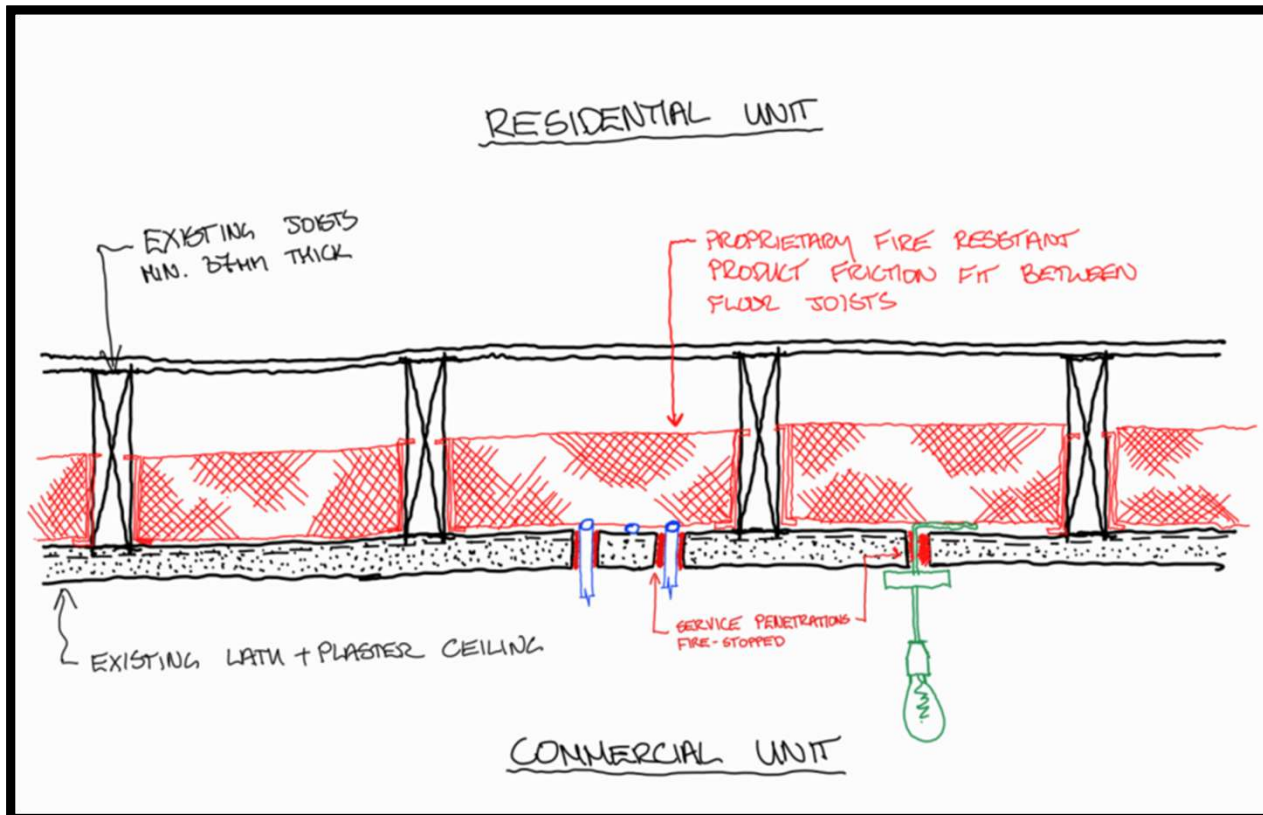
- Interview Findings – Fire Safety Consultants
 - Fire Safety Challenges Encountered:
 - Commercial Unit Services within First Floor Void,





Research Findings

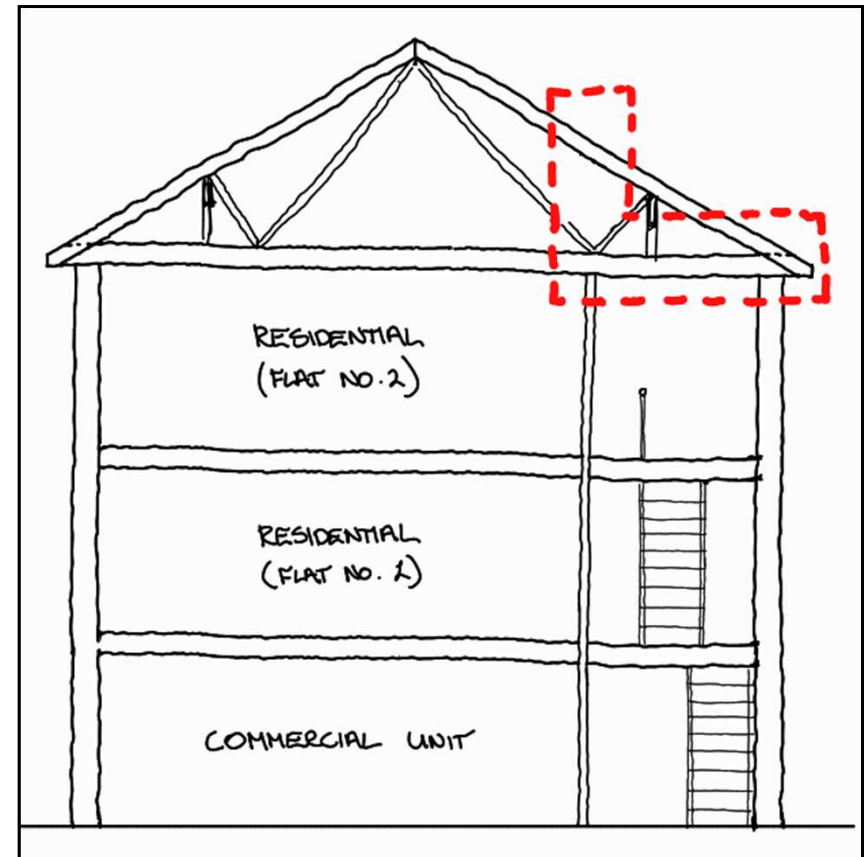
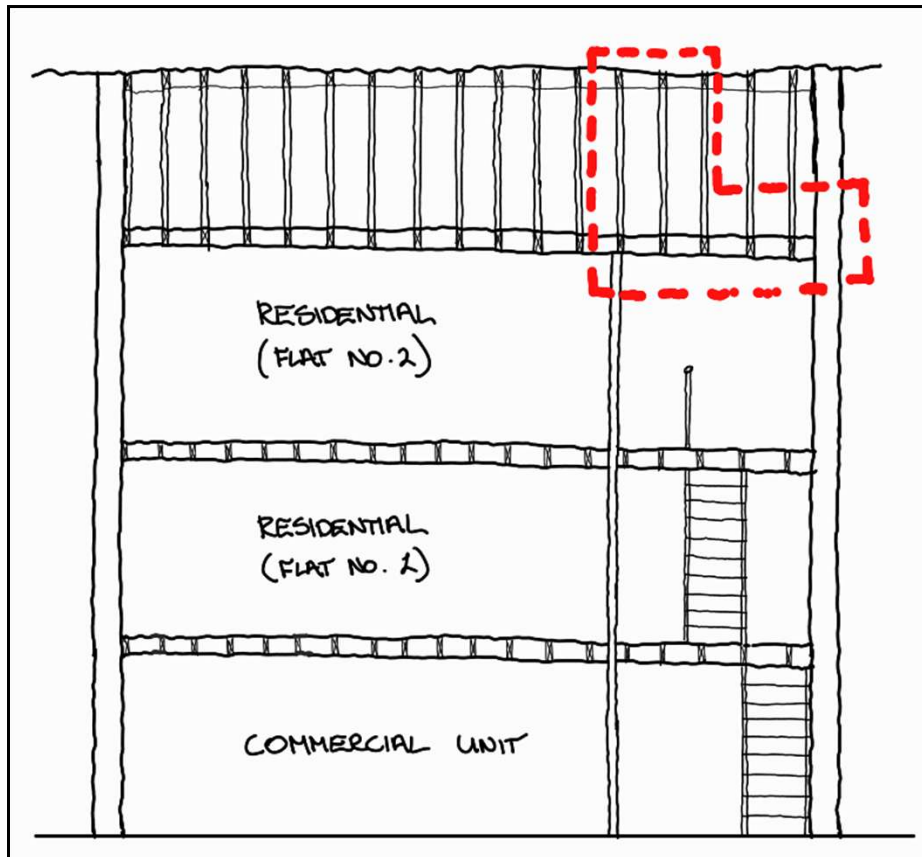
- **Fire Safety Challenges Encountered**
 - Accommodation of services in compartment floors.





Research Findings

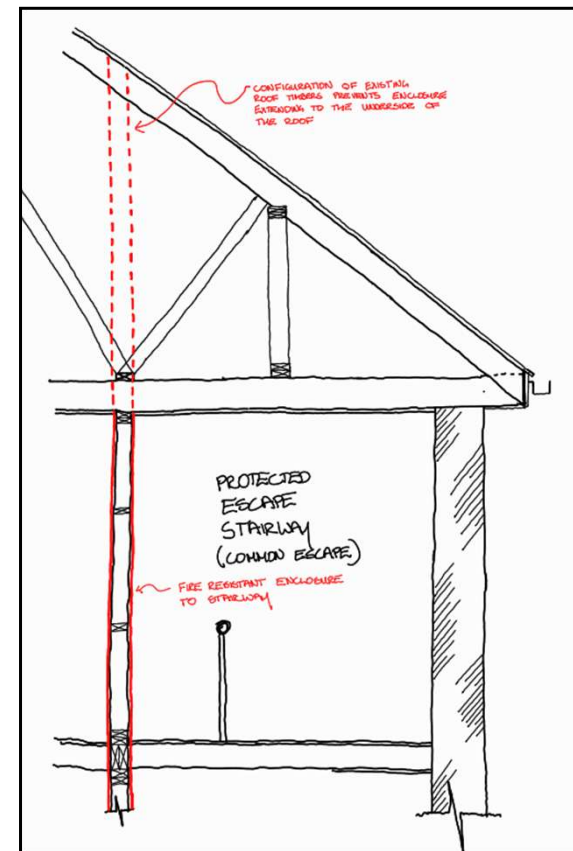
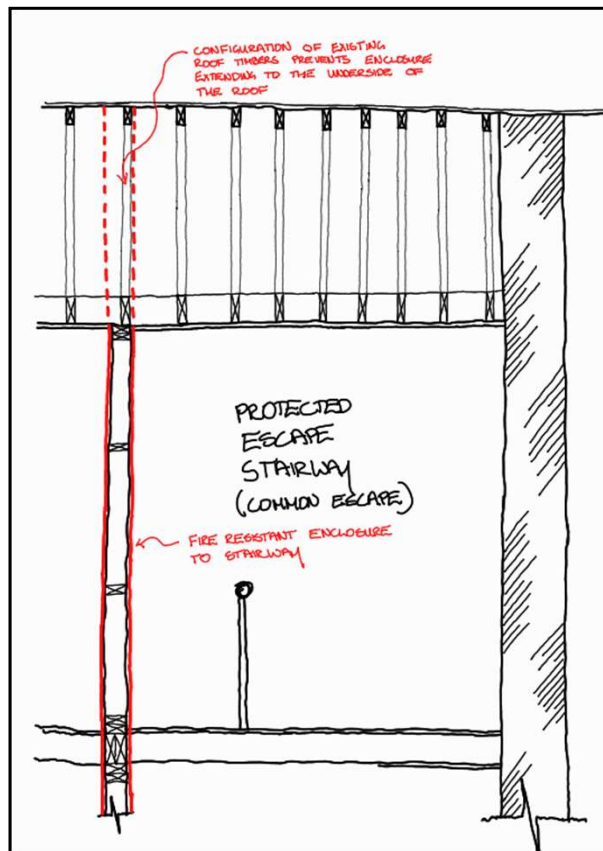
- **Interview Findings – Fire Safety Consultants**
 - Fire Safety Challenges Encountered:
 - Interface of protected stairway enclosure with existing roof,





Research Findings

- Interview Findings – Fire Safety Consultants
 - Fire Safety Challenges Encountered:
 - Interface of Protected Stairway and Roof,

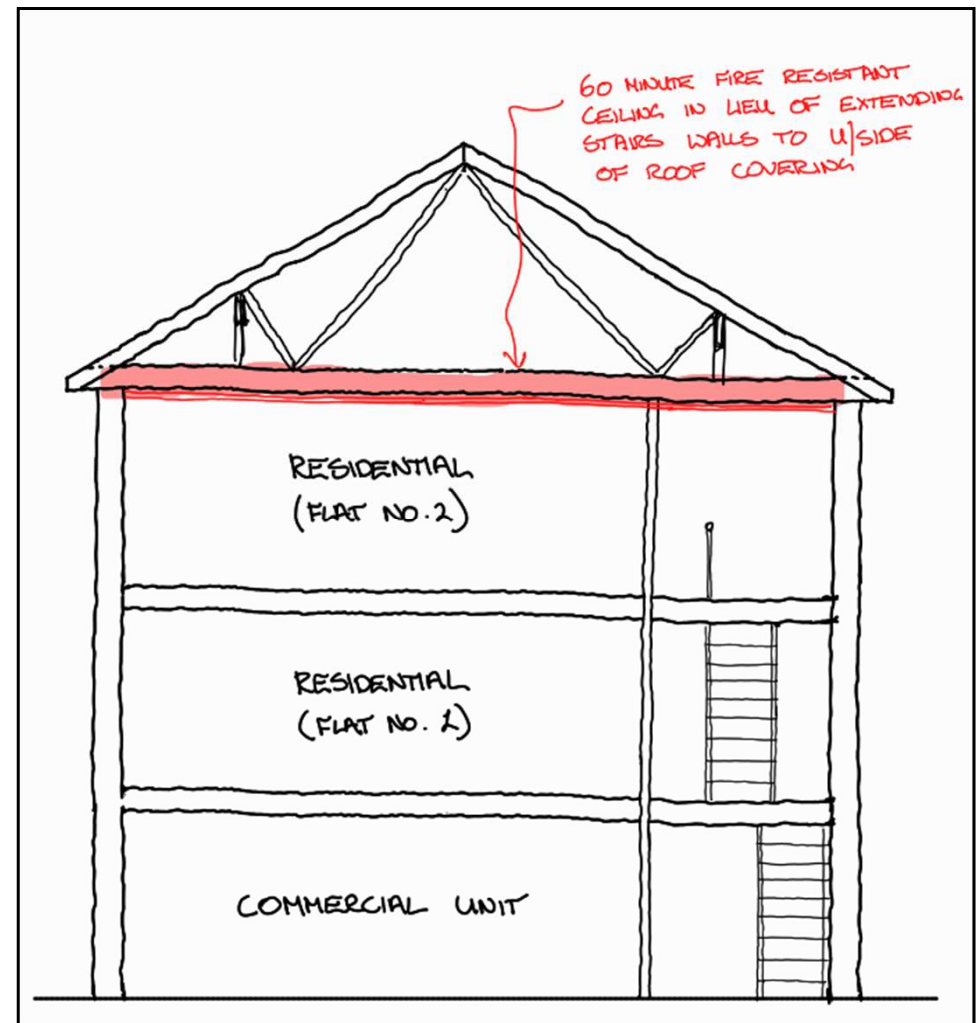




Research Findings

• Predominate Fire Safety Challenges Encountered

- Interface of stairway enclosure with roof,
 - 60-minute fire resistant ceiling – include in TGD B Vol.1 2024 as a viable option to stairway enclosure to roof,
 - Careful detailing required where AOV proposed to top of stairway.





Conclusions

- **Fire safety provisions can be easily applied to VATSU's:**
 - Common Sense and **Professional Judgement** required,
- **Additional guidance would help:**
 - Revise Fire Safety in Flats 1994 document – consider for wider reuse adoption,
 - Expand guidance on provision of compensatory measure in lieu of full adherence to TGD's,
 - Review TGD B in line with evacuation strategy of flats in Ireland (simultaneous evacuation),
 - Lobby protection to stairway excessive for buildings with small no. of dwelling units?
 - New single escape stairways permissible to be of timber construction?
 - Compartmentation provisions excessive for small no. of dwelling units?
 - Accommodation of services within compartment walls and floors acceptable?
 - 60-minute fire resistant ceiling to top floor?
- **Regulate the maintenance of fire detection and alarm systems in buildings with a sleeping risk (Section 37 of the FSA)**



Conclusions

•Methods of Ensuring Compliance:

- Prescriptive methods of compliance favoured,
- However, existing buildings are difficult to “shoe-horn” into modern codes,
- Cannot account for all eventualities in a prescriptive code – **professional judgement** is required,
- Recurring challenges could be addressed within a prescriptive guidance,
- Guidance on use of “compensatory measures” is required – measurable outcomes or considerations

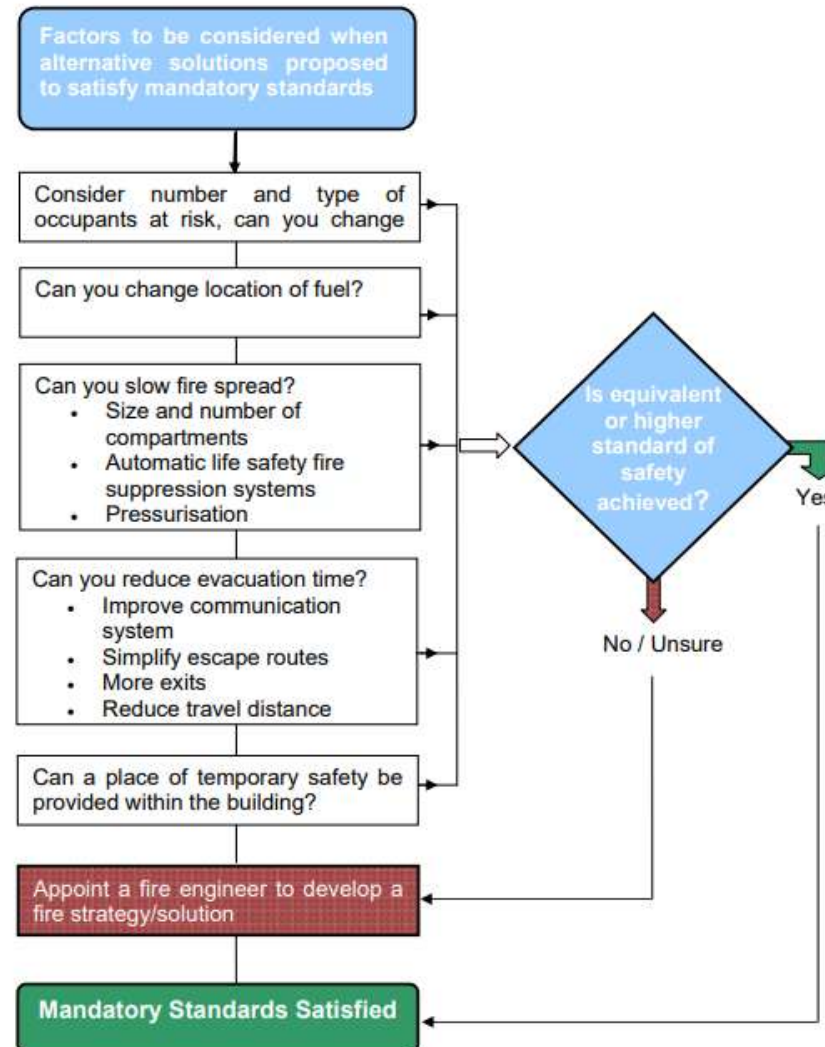


<https://www.gov.scot/publications/a-simplified-approach-to-alternative-fire-safety-strategies/>



Conclusions

•Simplify the approach.....



<https://www.gov.scot/publications/a-simplified-approach-to-alternative-fire-safety-strategies/>



Compensatory Measures

• TGD B Vol.1 2024 – Section 7

7.0.2.2 Compensating Measures

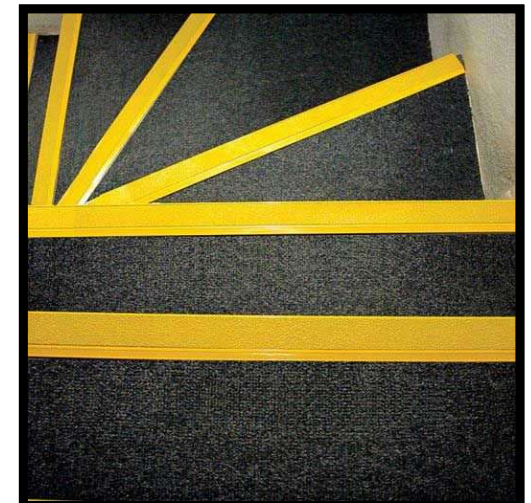
Where compensating fire safety measures are proposed, the nature and extent of such measures will depend on the circumstances in each particular case.

However, such measures could include some or all of the following:

- enhanced levels of life safety protection by automatic fire detection and alarm systems; or
- reduced travel distances; or
- enhanced building systems to aid evacuation; or
- enhanced smoke control measures; or
- pressurisation of stairway enclosures; or
- protection to escape routes from places of special fire risk; or
- enhanced performance of fire doors; or
- additional structural fire protection measures, such as increased levels of compartmentation of the building (see [Section 3](#)); or
- automatic fire suppression and extinguishing systems; or
- significantly increased room heights; or
- additional facilities for firefighting, e.g. dry risers.

This list is neither exhaustive nor in any order of preference. It is indicative of the range of options that may be considered.

**Consider compensatory measures
For other Requirements of the
Building Regulations.....**





Reuse of Vacant Buildings

Cannot fully comply with the TGD's.....
how do we ensure health, safety and welfare of people in and
around buildings?

Professional Judgement

How can we apply it? Is there a formula?





Operational Discretion = Professional Judgement

- Officers within the Fire Service are coached on utilisation of Operational Discretion,
- Not all situations fit neatly into a standard operating guideline (SOG),
- Sound Rationale required for stepping outside a SOG – Same principles apply for utilising Professional Judgement and stepping away from TGD guidance....

• 6 Questions to Ask Yourself:

1. Am I fully clear about why standard guidance is not appropriate?
2. Do I fully understand the risks involved?
3. Is the deviation justified and proportional in terms of risk versus benefit?
4. Is the deviation the minimum necessary to achieve the objectives?
5. Can I compensate for the deviation?
6. Am I satisfied that this is the Right Thing to do?



Comhairle Contae Thiobraid Árann
Tipperary County Council



Questions?



**“If I had an hour to solve a problem
I'd spend 55 minutes thinking about
the problem and 5 minutes thinking
about solutions.” – Albert Einstein**

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