



TALL BUILDINGS FIRE SAFETY CONFERENCE

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CAN STANDARD PASSENGER LIFTS BE SAFELY USED FOR EVACUATION IN RESIDENTIAL BUILDINGS?



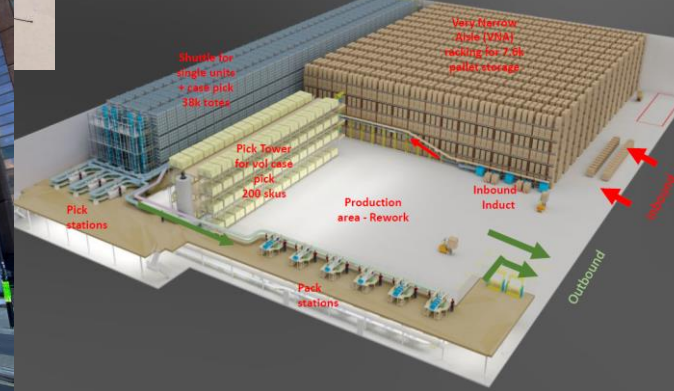
A BIT ABOUT ME

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- Fire Service Experience
- Regulator Experience
- Fire Engineering Experience



PRITCHARD ARCHITECTURE



DEFINE THE CHALLENGES

Why do we have lifts in residential buildings?

What are the consequences for people with restricted mobility?

How many people in the UK have a disability?

How many of these are mobility related?

What about other people who may have issues with using stairs?



HOW DO STANDARD LIFTS REACT IN A FIRE SITUATION?

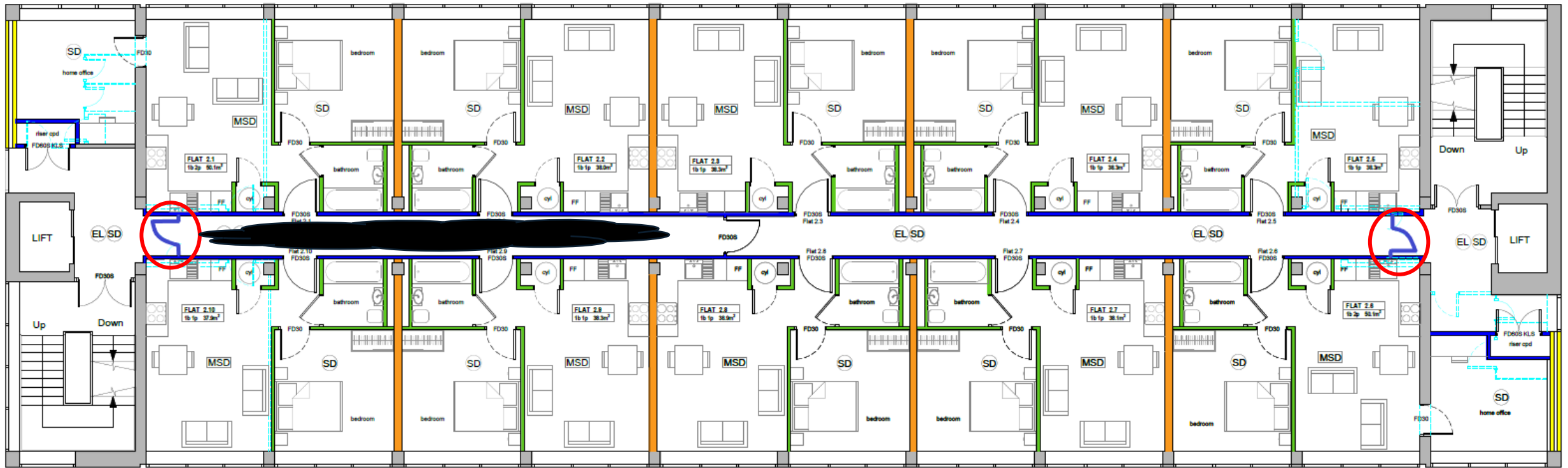


Typical cause-and-effect arrangements.

When will lifts stop working?



Typical layout of a 2-stair residential building



isting
o form
minimum
cal area

adapt ext
window
new AD
window
geometr
of 1.5m²

SCENARIO

- Fire in a flat, occupied by someone who would struggle to negotiate multiple flights of stairs
- They leave their flat safely and close the door behind them. No smoke enters the corridor.
- No evacuation lift within the building
- They move to the staircase, which is adjacent to the lift
- What should they do?
- What have they been told to do/not to do?
- The lift carries on working as normal.



WHAT ARE THE RISKS?

- The lift is defective and isn't working
- Smoke has entered the corridor, and the lift goes out of service
- They get in the lift, and smoke activates a detector in the corridor



IMPORTANT CONSIDERATIONS

- Where is the power supply for the lift(s)?
- What is the failure rate for the lift(s)
- Human factors – willingness to use a lift



SUMMARY

- New buildings may be built with evacuation lifts and temporary waiting spaces
- Existing buildings don't have these facilities, but have similar occupancies
- Understand the cause-and-effect arrangements
- Understand the fire safety strategy and the levels of compartmentation
- Power supply arrangements for the passenger lifts
- Will residents use the lifts if given 'permission'?
- How do you now feel about their use?



END OF SESSION. QUESTIONS?

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