

25th

ANNUAL FIRE SAFETY CONFERENCE

23 & 24 February 2023
Armagh City Hotel

“The changing face of fire safety”

Marking **50** years of the Building Regulations in
Northern Ireland

www.buildingcontrol-ni.com

BCNI - 25th Annual Fire Safety Conference

National Fire Safety Update – Part 1 (Scotland)

Colin Hird
Building Standards Division
23 February 2023



Introduction

- Background
 - Political
 - Technical
- Key changes to Scottish building regulations since 1999
- Future

Garnock Court, Irvine (11 June 1999)

- Brian Donohoe MP for North Ayrshire
- UK Parliamentary Inquiry by the a sub-committee of Environment Transport and Regional Affairs



UK Government - Environment, Transport and Regional Affairs Committee

“we do not believe that it should take a serious fire in which many people are killed before all reasonable steps are taken towards minimising the risks.”

Published - 14 December 1999

Building Regs - 5th Amendment (2000)

- *Building Standards and Procedure Amendment (Scotland) Regulations 1999*
- *Laid before SP 14 December 1999 , came into force on 17th April 2000.*
- *Class O cladding and non-combustible insulation introduced in external wall cavities in all high rise buildings > 18m*

Building Regs – 6th Amendment (2002)

- Building Standards Amendment (Scotland) Regulations 2001
- Laid before SP 20 Sept 2001, came into force on 4 March 2002
- BRE Fire Note 9 Assessing the fire performance of external cladding systems (BRE, 1999)
- 30 min FR cavities barriers required to rainscreen cladding



Building (Scotland) Regulations 2004

- Came into force 1 May 2005
- External wall cladding systems in high rise domestic buildings > 18m should be non-combustible or meet BR135 when tested in accordance with BS 8414
- Mandatory requirement for sprinklers in all high rise domestic buildings > 18m, care homes and sheltered housing

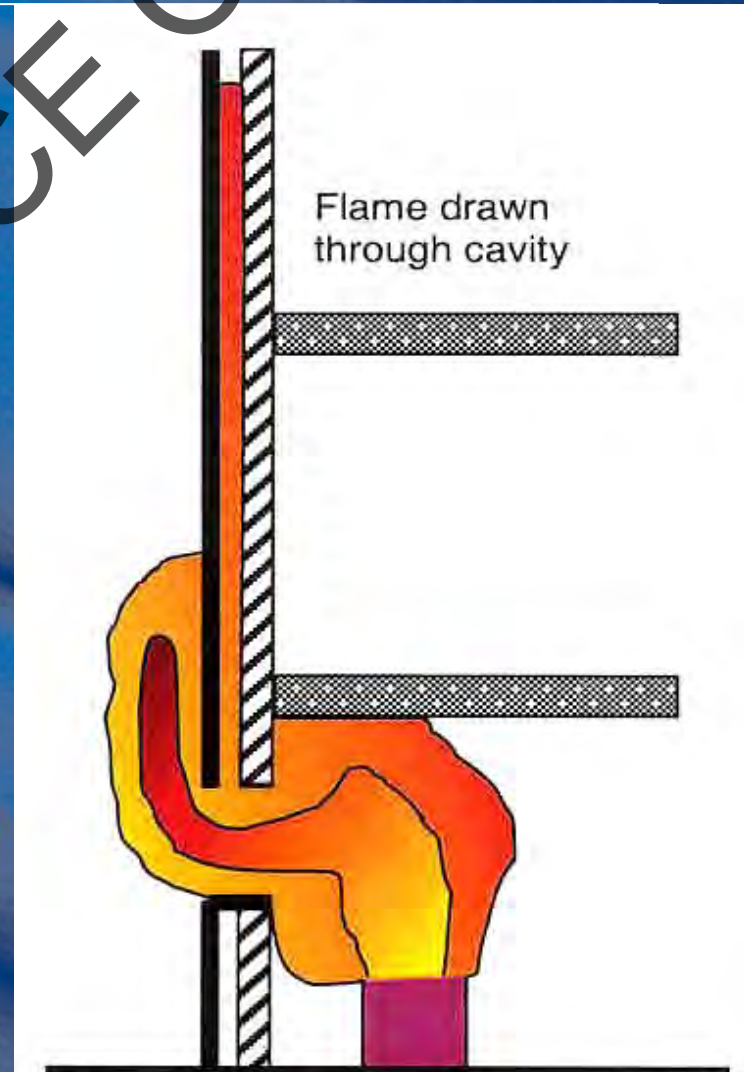
Building (Scotland) Regulations 2004

2.1 & 2.2 Compartmentation
and separation (junctions)

2.4 Cavities

2.6 Spread to neighbouring
buildings

2.7 Spread on external walls



Scottish Parliament - Education and Skills Committee



January 2016

Ministerial Working Group



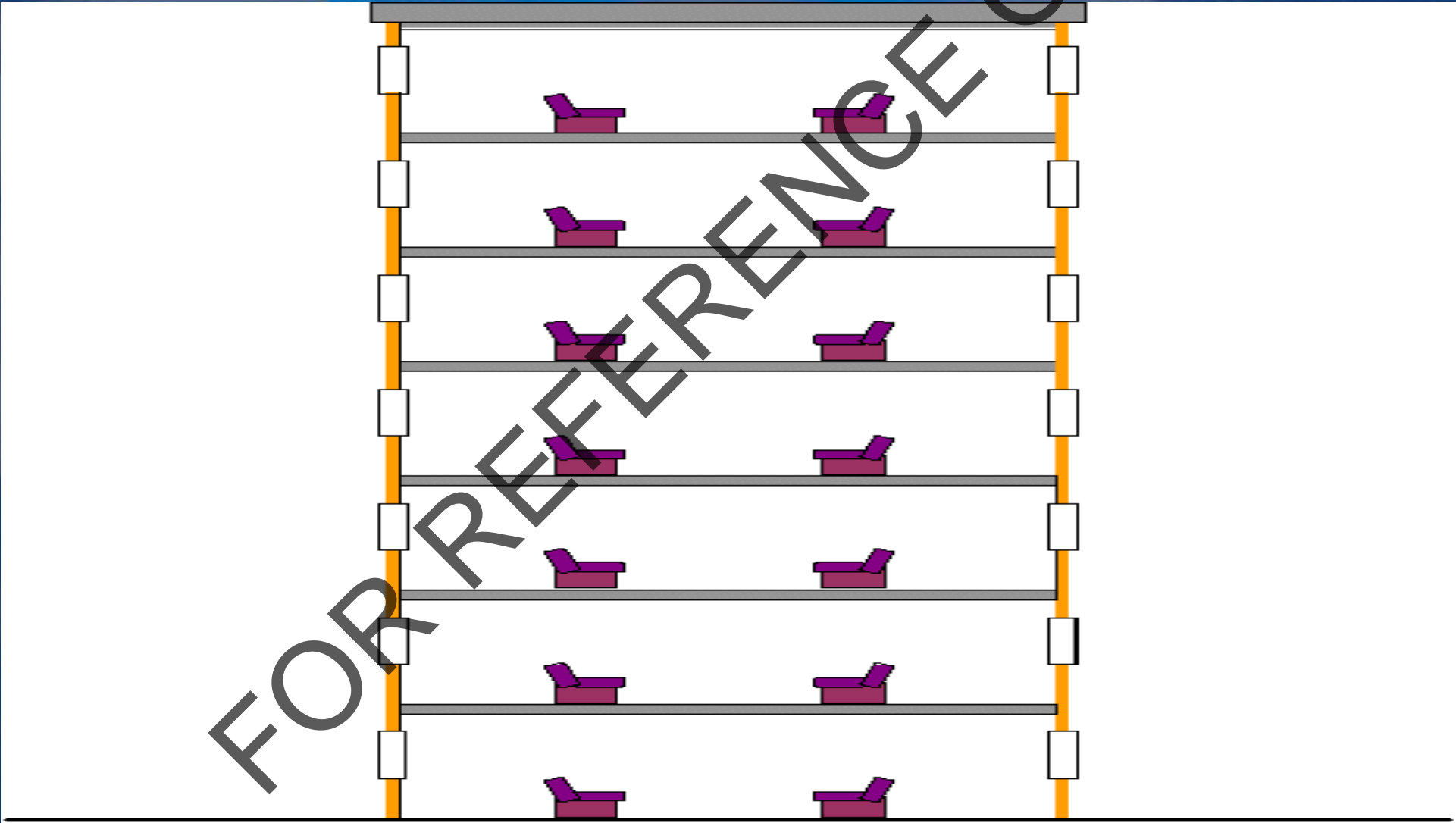
June 2017

Ministerial Working Group

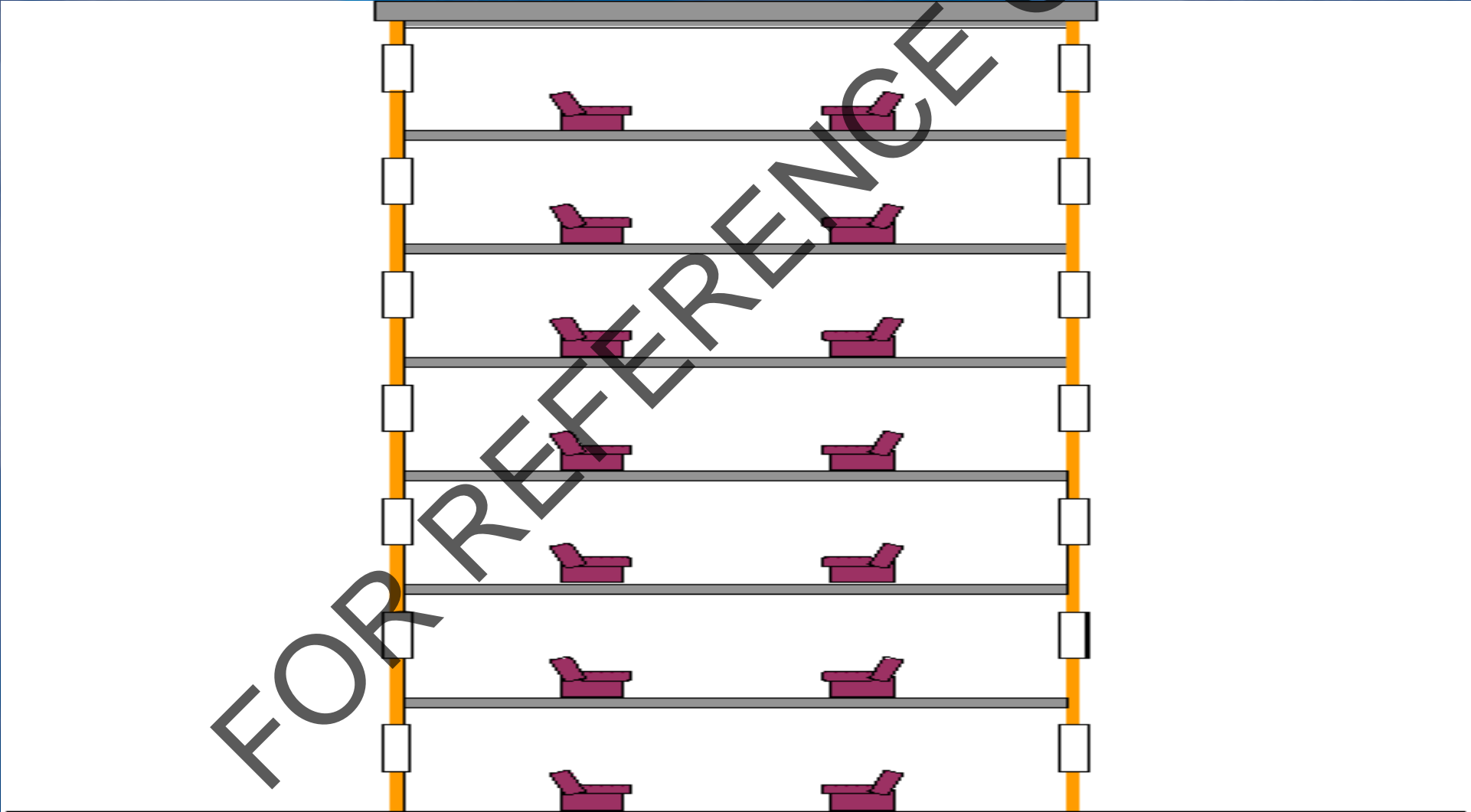
- Building Standards
 - Fire safety review panels
 - Compliance and Enforcement
- Fire alarms (tolerable standard)
- Fire safety regime review
- Building Inventory – 780 HRDB > 18m
- Scottish Advice Note EWS
- Single Building Assessment and Scottish Safer Buildings Accord

External wall systems

Non-combustible building



Irvine Fire (June 1999)



Fire rarely spreads beyond the dwelling of fire origin

- Curle Street Fire Glasgow



But when it does.....



- Fire spread into protected lobby
- 60 mins FR Sc Door in high rise flats

Safe refuge – stay put principle



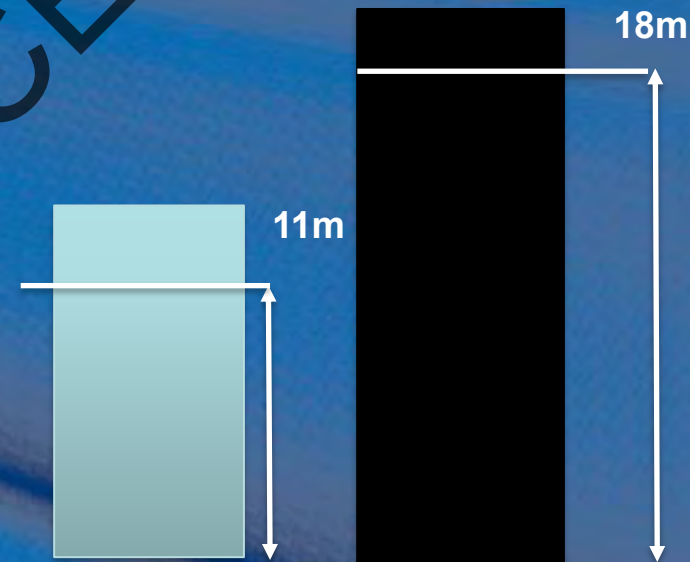
- Safe refuge within adjoining dwellings

Key Changes to Building Standards (post Grenfell)

- October 2019
- March 2021
- June 2022

October 2019 – Cladding guidance

- Euro Class A1 (non-combustible) or A2 (limited combustibility) cladding and insulation in EWI for all buildings > 11m
 - A1/A2 – Hospitals, Entertainment / Assembly buildings and Residential care buildings (any height) - Exemptions for small buildings
- OR**
- BS 8414 / BR 135

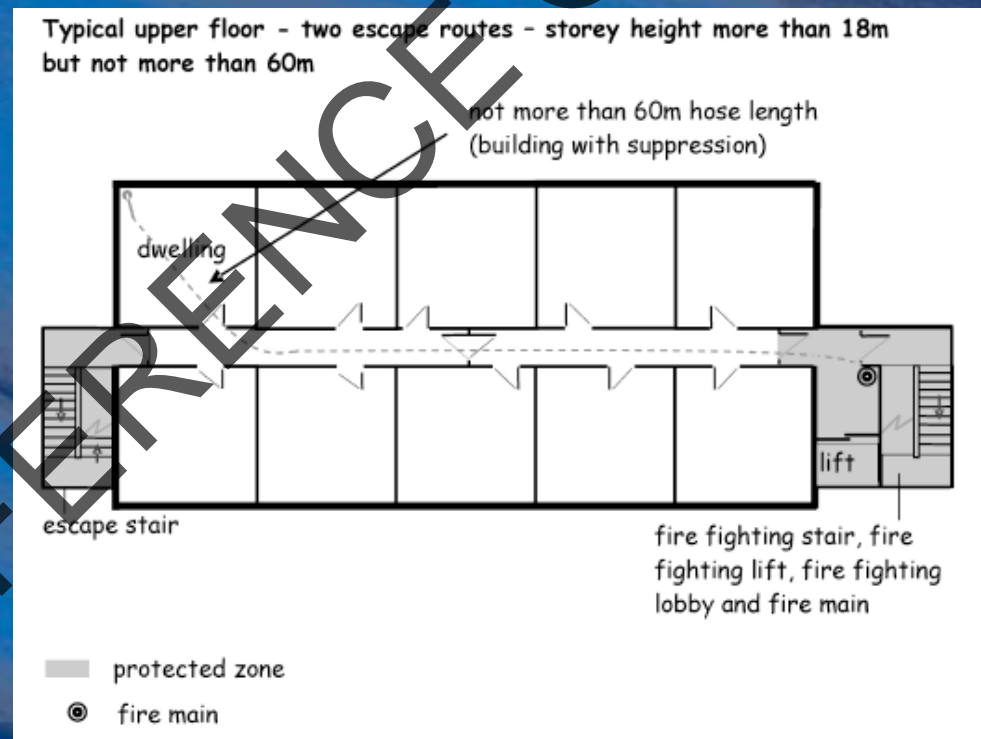
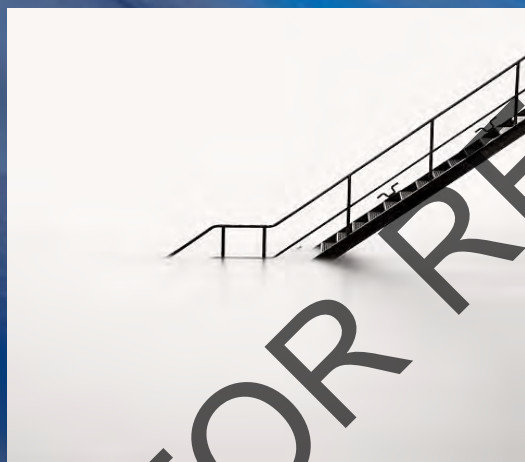


October 2019 – Specified attachments



- > 11m A1 or A2
(guidance)

October 2019 - Two escape stair in new high rise domestic buildings > 18m



October 2019 - Evacuation systems for Fire and Rescue Service

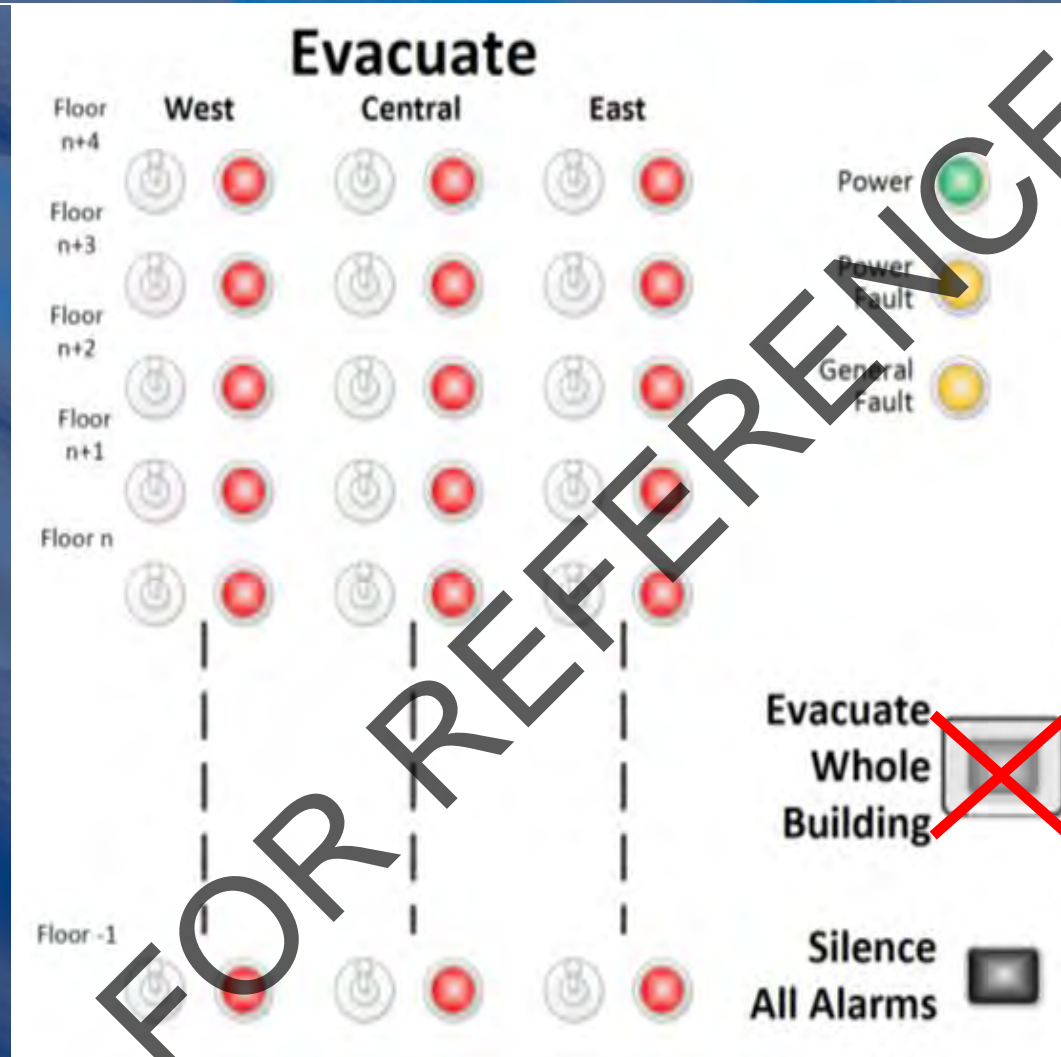


Evacuation System: For
Fire and Rescue Service
Use Only



High rise domestic buildings > 18m (BS 8629)

October 2019 - Multiple escape stair in high rise domestic building



- Horizontally aligned
- No evacuate whole building switch

October 2019 - Storey identification signs and dwelling indicator signs



The Scottish
Government

March 2021 – Changes to Standard 2.15 Automatic Fire Suppression Systems

- All new social housing
- All new flats
- Shared multi-occupancy residential building
- Came into force 1 March 2021
- Challenges around conversions



June 2022 - External wall cladding systems and specified attachments

Regulation 8 amended

- Relevant buildings > 11m – can only use A1 or A2 materials (no option to use BS 8414)
- Relevant buildings – dwellings, hospitals, residential care buildings, assembly and entertainment buildings, sheltered housing complexes, shared multi-occupied residential buildings
- External wall systems explained in clause 2.7.1

June 2022 - External wall cladding systems and specified attachments

Regulation 8 continued

- Highly combustible metal composite material prohibited for use in cladding and internal linings in any building at any height.
- 10mm thick max with two metal layers and combustible core material $> 35 \text{ MJ/kg}$

June 2022 - External wall cladding systems and specified attachments

Schedule 3

- Building warrant required for replacement cladding systems except minor repairs
- Can no longer replace entire cladding systems on a like for like basis

June 2022 - External wall cladding systems and specified attachments

Mandatory standard 2.7 amended

*Every building must be designed and constructed in such a way, **having regard to the height, use and position of the building**, that in the event of an outbreak of fire within the building, or from an external source, the spread of fire on the external walls of the building is inhibited.*

Future

Standard 2:15 Automatic Fire Suppression Systems (Conversions and extensions)

Exemptions?

- low level conversions to flats
- Extensions to existing flats, care homes, sheltered housing complexes

Historic building fires

Building regulations - Building standards - gov.scot (www.gov.scot)



The Scottish
Government
Riaghaltas na h-Alba

Thank you for listening.



Scottish
Government