

Research and Information Service Briefing Paper

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Dr Dan Hull

Approaches taken to combustible cladding materials in Ireland

1 Summary

This paper follows on from RalSe research paper, 'A comparison of approaches regarding a ban on the use of combustible cladding materials' (NIAR 1-21). It sets out the approach taken currently to cladding on high rise buildings in the Republic of Ireland.

2 Fire Safety Task Force

Following the Grenfell Tower fire on 14 June 2017, a Fire Safety Task Force was established by the Government of Ireland on 27 June of that year¹. The remit of the Task Force was to examine all high rise buildings (defined as more than six storeys or 18m in height), and multi-storey, multi-unit social housing. A survey was undertaken to establish if the circumstances which led to the Grenfell Tower fire were present in these

¹ Government of Ireland. May 2018. Fire Safety in Ireland: Report of the Fire Safety Task Force: https://assets.gov.ie/80787/56bbd3b1-2788-4f45-810b-dca777e697ff.pdf

forms of building in Ireland. Specifically, they were asked to identify those buildings which had external cladding which might be cause for concern.

The Task Force also requested local authorities to assess fire safety measures in their existing multi-storey, multi-unit social housing.

As part of the work of the Task Force, 842 medium to high rise buildings were reviewed (ie buildings of more than six storeys or 18m in height). 291 of these buildings were identified as having external cladding systems 'of interest'. In the case of 226 of these, owners were required to carry out fire safety assessments. A number of buildings were identified as requiring remedial works².

The Task Force published its report in May 2018³. Among its findings and recommendations, the report concluded that 'the combination of contributory factors which appear to have existed in Grenfell Tower do not appear to be present in medium to high rise buildings in Ireland'⁴.

Local Authorities were requested to examine fire safety arrangements in 1,227 Multi-Unit Social Housing buildings. It was found that the buildings had 'proper escape routes'⁵, that 94% had communal alarm systems and 93% had emergency lighting systems.

The Task Force report included the following recommendations:

- It was recommended that a further assessment process and improvement works should be conducted for 226 of the 842 medium to high rise buildings reviewed.
- Management companies and 'persons having control' should review their fire safety facilities and evacuation procedures and fire services should offer training to 'Directors of Apartment Management Companies' on 'key life safety issues'.
- The Task Force also focused on the statutory responsibilities of the 'person having control' of both public and private sector premises, as set out in section 18 of the Fire Services Acts⁶. In particular, a number of amendments were proposed to the current regulatory system in order to enhance fire safety in certain types of residential/sleeping accommodation.
- It was proposed that the statutory obligations imposed on the 'person having control' should be made more explicit and that new reporting mechanisms should be introduced by which the fire safety arrangements in place in premises and sleeping accommodation are brought to the attention of the public, including a new

² Dáil Éireann Debate. 26.11.19. 'Fire Safety Regulations': https://www.oireachtas.ie/en/debates/question/2019-11-26/507/

³ Government of Ireland. May 2018. Fire Safety in Ireland: Report of the Fire Safety Task Force: https://assets.gov.ie/80787/56bbd3b1-2788-4f45-810b-dca777e697ff.pdf

⁴ Department of Housing, Local Government and Heritage. 5.6.18. 'Eoghan Murphy publishes Report of Fire Safety Task Force "Fire Safety in Ireland"': https://www.gov.ie/ga/preasraitis/3b25e1-eoghan-murphy-publishes-report-of-fire-safety-task-force-fire-safety/

⁵ Government of Ireland 2018, as above: page 13.

⁶ Fire Services Act 1981: http://www.irishstatutebook.ie/eli/1981/act/30/enacted/en/html

requirement for a 'Public Notice of Fire Safety' in every building to which section 18(2) of the Fire Services Acts applies.

- It was recommended that there should be better targeting and use of resources by local fire authorities in their 'engineer, educate & enforcement' roles.
- Periodic reviews/overview reports of fire safety in local authority provided social housing should be undertaken and reported every five years.
- The Task Force stated that national oversight should be maintained over remedial works in the 226 buildings and that an oversight report should be provided to the Minister for Housing, Planning and Local Government at the end of the implementation process.

The Task Force made no recommendations regarding the banning of combustible cladding, nor indeed the design of building materials of any kind. This has been the subject of some criticism. For example, Dr Orla Hegarty, lecturer in architecture at University College Dublin, made the following comments to the Houses of the Oireachtas Joint Committee on Housing, Planning, Community & Local Government:

I have been following the UK response to the Grenfell fire closely. By comparison, the response in Ireland has been very limited, there has been no regulatory change signalled or guidance issued to building designers. Public safety concerns are legitimate.⁷

In response to the publication of the first Grenfell Tower inquiry report, Dr Hegarty stated that:

The Government needs to reform building safety regulations but also put in place an effective building control system – regulations alone are not enough, they need to be properly monitored.⁸

3 Technical guidance on the use of cladding

In December 2017 the Department of Housing, Planning and Local Government issued a new safety guidance note, *Assessing Existing Cladding Systems in Buildings of More Than Six Storeys, or More Than 18m in Height.* This guidance note was prepared as part of the work of the Fire Safety Task Force and is 'intended to assist those carrying out, or reviewing, fire safety assessments of cladding systems'⁹.

⁷ Houses of the Oireachtas Joint Committee on Housing, Planning, Community & Local Government. 5.10.18. 'Opening statement: Building Standards - Fire safety, damp and ventilation'.

Extra.ie. 31.10.19 'Top architect warns Ireland 'has not learned Grenfell lessons' after report into 72 deaths in London building blaze': https://extra.ie/2019/10/31/news/irish-news/building-safety-regulations-ireland-grenfell

⁹ Department of Housing, Planning and Local Government. 2017. Fire safety guidance note 01 of 2017: Assessing existing cladding systems in buildings of more than six storeys, or more than 18m in height: page 2. http://www.housing.gov.ie/sites/default/files/publications/files/fire_safety_guidance_note_01_of_2017.pdf

The guidance describes how assessments on cladding systems should be carried out, by whom, and what considerations should be made.

In terms of the specification of materials used in cladding and insulation systems, the guidance refers back to *Technical Guidance Document B – Fire Safety* (2006)¹⁰.

A table within *Technical Guidance Document B*, 'Table 4.1: Provision for external surfaces of walls'¹¹, states that where a building is more than 18m in height, the external surface must comprise material that meets the following classification: Class B - s3, d2 (European)¹² or Class 0 (National)¹³.

What do these terms mean? 14

BS EN 13501-1 defines the classes A1 and A2 as follows:	
Class A1	Will not contribute in any stage of the fire, including the fully developed fire
Class A2	Will not significantly contribute to the fire load and fire growth in a fully developed fire
Class B	Combustible materials – Very Limited contribution to fire

The characteristics 's' and 'd' are defined as follows:	
s1	Weak or no smoke
s2	Medium smoke
s3	High smoke
d0	No dripping at all
d1	Slow dripping recorded
d2	High dripping recorded

A note is provided stating that an alternative route to conforming to the fire safety guidance would be to use a different test method:

One alternative to meeting the provisions in Table 4.1 could be BRE Fire Note 9 Assessing the fire performance of external cladding systems: a test method (BRE, 1999)¹⁵.

¹⁰ Government of Ireland. 2006. Building Regulations. Technical Guidance Document B – Fire Safety Section B4: External Fire Spread. Reprinted Edition 2020, Amendments and corrections incorporated: https://assets.gov.ie/100071/0f55fb77-96a3-4dd5-8b93-7648880296e9.pdf

¹¹ Government of Ireland 2006, as above: page 108.

¹² European Standard EN-13501-1 (see below for full reference).

¹³ (National) relates to performance under BS 476: Part 6, (see paragraph A11 of Appendix A) (see page 108).

¹⁴ For more detail on these classifications, see See Lane, B. 2018. <u>Phase 1 Report - Appendix F. Reaction to fire tests and classifications</u>. Grenfell Tower - fire safety investigation; also *UK Government. Fire safety: Approved Document B*: https://www.gov.uk/government/publications/fire-safety-approved-document-b and also British Standard. BS EN 13501-1:2007 +A1:2009: Fire classification of construction products and building elements — Part 1: Classification using data from reaction to fire tests. Brussels: European Committee for Standardization. For an explanation of these classifications and how they apply to specific forms of material, it is recommended that expert advice is sought.

¹⁵ Government of Ireland 2006, as above: page 107; see also Colwell, SA & Smit, DJ. 1999. Assessing the fire performance of external cladding systems: a test method (FN 9). British Research Establishment.

The 2017 assessment guidance states that the test criteria provided by BR135 and BS8414 can be used, but that an alternative desktop assessment may be used instead:

Alternatively, in cases where no fire specific test data exists for a particular cladding system, assessment may be made using a desktop study report from a competent person, stating whether, in their opinion, the BR135 criteria would be met with the system under assessment.¹⁶

A 'Background Note on Recent Changes to Part B and Technical Guidance Document' states that additional guidance amending *Technical Guidance Document B – Fire Safety* was published in February 2020¹⁷. However, this additional guidance did not make any changes to guidance regarding cladding, covering instead issues such as common alarm systems in buildings containing flats, refuge spaces, new provisions for open plan flats, corridor travel distances and domestic sprinkler systems.

It would seem then that *Technical Guidance Document B – Fire Safety* does not explicitly ban combustible cladding materials, and nor have subsequent revisions of the document.

4 Forthcoming review

The aforementioned 'Background Note on Recent Changes to Part B and Technical Guidance Document' from February 2020 stated that a 'full and comprehensive review' of *Technical Guidance Document B – Fire Safety* is being conducted by the Department of Housing, Local Government and Heritage¹⁸. This will consider the recommendations of the Hackitt Review in England, as well as 'common and emerging building trends, developments and events from a global perspective, matters relating to external fire spread, external fire resistance, internal fire resistance, cladding systems, sprinklers, etc.'.

It is understood that the Department of Housing, Local Government and Heritage established a consultative committee in December 2020 to discuss the technical revision of *Technical Guidance Document B – Fire Safety* prior to public consultation later in 2021¹⁹.

¹⁶ Department of Housing, Planning and Local Government 2017, as above: page 4.

¹⁷ Department of Housing, Planning and Local Government. 2020. Background Note on Recent Changes to Part B and Technical Guidance Document: https://assets.gov.ie/100073/5e9fcab7-5375-4827-9075-26097110185e.pdf

¹⁸ Department of Housing, Planning and Local Government. 2020. Background Note on Recent Changes to Part B and Technical Guidance Document: https://assets.gov.ie/100073/5e9fcab7-5375-4827-9075-26097110185e.pdf

¹⁹ These details were kindly provided by colleagues in the Houses of the Oireachtas Library and Research Service, following correspondence with the Department of Housing, Local Government and Heritage.