

Fire Safety Certificate Appeal Report

ABP-319849-24

Appeal v Condition (1 no.)	Appeal against Conditions No. 3 attached to granted Fire Safety Certificate (Reg. Ref. No. FSC2401539DC/SN 3017517)
Development Description	Right Click, First, Second and Third Floor extension to the return to the rear and material alteration to Ground Floor shop for which Fire Safety Certificate Reference SN30001682 has been granted in respect of property at 70 Camden Street Lower, Dublin 2
Building Control Authority Fire Safety Certificate application number:	FSC2401530DC
Appellant	Mr. Jas Rait
Appellant's Agent	James M. Briscoe Architect
Building Control Authority:	Dublin City Council
Inspector	Dr. Raymond J. Connolly

Contents

1.0	Introduction
2.0	Information Considered4
3.0	Relevant History/Cases5
4.0	Appellant's Case7
5.0	Building Control Authority Case8
6.0	Assessment9
7.0	Recommendation15
8.0	Reasons and Considerations16
9.0	Conditions16
10.0	Sign off17

1.0 Introduction

- 1.1. The subject Fire Safety Certificate application relates to the first floor extension of an existing apartment, the creation of new two-storey apartment at second and third floor, the inclusion of bicycle and bin stores at ground (entrance) level above an existing shop unit at 70 Camden Street Lower, Dublin 2.
- 1.2. The proposed building comprises a ground level entrance (with storage) and 2 no. apartments over first and second/third floor levels. The residential parts are not connected to the existing ground floor shop unit..
- 1.3. The building was originally granted a Fire Safety Certificate (Ref. SN30001682) by Dublin City Council.
- The subject Fire Safety Certificate (Ref. SN3017517/FSC2401530/DC) was granted by Dublin City Council on 22nd May 2024 subject to 4 no. conditions.
- 1.5. This appeal relates to an **extension** and **material alteration** of a previously approved building and specifically the attachment of Condition No. 3 by Dublin City Council to the granted Fire Safety Certificate comprising:-

Condition No. 3

The proposed Bike Store and Bin Store at Ground Floor Level shall not be permitted. <u>Reason</u>

To comply with Part B of the Second Schedule to the Building Regulations 1997 to 2022.

1.6. In my opinion, the specific nature of the appeal versus the attachment of Condition No. 3 to the Fire Safety Certificate does not require *de novo* consideration in this instance.

2.0 Information Considered

- 2.1. The information considered in this appeal comprised the following:-
 - Letter of Appeal to An Bord Pleanála from James M. Briscoe Architect acting on behalf of Mr. Jas Rait dated 28th May 2025.
 - Fire Safety Certificate issued by Dublin City Council under reference Ref. SN3017517/FSC2401530/DC dated 22nd May 2024 and subject of 4 no. conditions.
 - James M. Briscoe Architect Compliance Report (No. 2304.39) Fire Safety Certificate, Extension to First, Second and Third Floors, return to the rear and material alteration to Ground Floor at Right-Click Ltd., 70 Camden Street Lower, Dublin 2 and associated drawings submitted on 8th February 2024.
 - James M. Briscoe Architect FSC Further Information Letter dated 7th March 2024.
 - James M. Briscoe Architect *FSC Further Information Letter* with associated report and drawings dated 19th March 2024.
 - James M. Briscoe Architect FSC Further Information Letter with associated report and drawings dated 26th March 2024.
 - James M. Briscoe Architect FSC Further Information Letter dated 29th April 2024.
 - James M. Briscoe Architect FSC Further Information Letter with associated drawings dated 6th May 2024.
 - Dublin Fire Brigade's submission to the Board on 4th July 2024 comprising Fire Officer's Report on Fire Safety Certificate appeal.
 - Letter to An Bord Pleanála from James M. Briscoe Architect acting on behalf of Mr. Jas Rait, dated 21st July 2024 and making observations regarding Fire Officer's Report.

Relevant History/Cases

2.2. I am not aware of any other Board decisions in respect of other developments elsewhere that may be relevant to this appeal and accordingly I am offering my opinion to the Board in this matter solely on the basis of the information provided to me as scheduled in Paragraph 2.1 above.

3.0 Appellant's Case

- 3.1 The appellant includes the following points in support of the appeal:
 - Relevant documents include Technical Guidance Document B (2006), BS 5588:Part 1 (1990) and BS 5588:Part 11:1997.
 - The bicycle and bin stores would be considered ancillary use to the residential upstairs and office at ground floor level in both codes.
 - Considering the bicycle and bin stores as places of high risk, the recommendations of Clause 14.6.2 of BS 5588:Part 1:1990 would apply comprising:-
 - (a) The protected stairway should be separated from ancillary accommodation by a protected lobby.
 - (b) Non-residential accommodation should be separated from the residential protected stairway by a protected lobby.
 - (c) If the stairway provides access to a car park, the protected lobby should be ventilated.
 - (d) If the stairway serves a place of higher fire risk, the protected lobby should be ventilated.
 - (e) All basement storeys should be separated from the stairway by protected lobbies.
 - (f) In a small single stair building, protected lobbies separating ancillary accommodation should be ventilated.

- The subject bin store is separated from the protected stairway by a bicycle store having 0.2m² permanent ventilation and also by a protected lobby having 0.4 m² permanent ventilation.
- The stairway enclosure has 3 no. FD30S fire door separation to the bin store.
- If the bin store is not provided, refuse is likely to accumulate and obstruct the escape route.
- The subject bicycle store is in compliance with 1.3.8.1(d) and 1.3.8.4(iii) of Technical Guidance Document B in that it is approached by a protected lobby having 0.4 m² permanent ventilation.
- If the bicycle store is not provided, bicycles are likely to be stored in the circulation routes or the protected entrance hallways of flats thereby endangering the means of escape.
- There is a policy of prohibiting e-bikes and e-scooters within the subject building.
- 3.2 The appellant responds to the submission of Dublin City Council by suggesting that he has acknowledged the fire risk associated with e-bikes and e-scooters by prohibiting their storage within the building and also by providing compensating fire safety measures including:-
 - 60 minutes fire-resisting enclosure.
 - Ventilated shaft to bicycle (store).
 - Ventilated shaft to protected lobby the bicycle store [sic].

4.0 Building Control Authority Case

- 4.1 Dublin City Council suggests that the functional nature of the fire safety objectives set out in the Second Schedule of the Building Regulations 2006 (as amended) allows for the consideration of new hazards due to changes in technology and materials that may not be addressed within the current guidance, such as Technical Guidance Document B (2006), and that Lithium-ion Batteries represent such a new hazard.
- 4.2 Dublin City Council find it "very difficult to envisage how the policy of no e-scooters or ebikes would be policed in reality".
- 4.3 The fire risk associated with Lithium-ion battery powered e-bikes and e-scooters is not limited to risks associated with the battery charging process and the absence of power outlets does not ameliorate the risk.
- 4.4 The extent of permanent natural ventilation provided to the bicycle store (0.2 m²) and the protected lobby (0.4 m²) would not be adequate to deal with the amount of smoke generated by a Lithium-ion battery fire and there would arise a risk of smoke spillage into the single protected stair.
- 4.5 Dublin City Council state that fires involving e-bikes and e-scooters represent the fastest growing fire trend internationally and present information from international sources to support this contention. Furthermore, fires involving Lithium-ion batteries produce toxic fumes and smoke to a greater extent than typical fires and can also result in the creation of potentially explosive atmospheres.
- 4.6 The proposed design does not comply with Clause 21.2(c) of BS 5588:Part 1:1990 which requires that bin stores be approached by way of a small protected lobby with not less than 0.2 m² of permanent ventilation.

5.0 Assessment

"De Novo" assessment/appeal v conditions

5.1 Having regard to the nature of the appeal which is solely against attachment of conditions and having considered the drawings, details and submissions on the file and having regard to the provisions of Article 40 of the Building Control Regulations, 1997 (as amended), I am satisfied that the determination by the Board of this application as if it had been made to it in the first instance would not be warranted. Accordingly, I consider that it would be appropriate to use the provisions of Article 40(2) of the Building Control Regulations, 1997 (as amended).

Condition No. 3

The proposed Bike Store and Bin Store at Ground Floor Level shall not be permitted. <u>Reason</u> To comply with Part B of the Second Schedule to the Building Regulations 1997 to

2022.

- 6.1 Acting for the appellant, James M. Briscoe Architect states in *Compliance Report (No.* 2304.39) Fire Safety Certificate, Extension to First, Second and Third Floors, return to the rear and material alteration to Ground Floor at Right-Click Ltd., 70 Camden Street Lower, Dublin 2 that the following primary references are being used to demonstrate compliance with Part B to te Building Regulations:-
 - Technical Guidance Document B (2006) + A1 (2020).
 - BS 5588:Part 1, *Fire precautions in the design, construction and use of buildings code of practice for residential buildings* (1990).
- 6.2 However, in support of the proposed design layout, James M. Briscoe Architect offers extracts from design guidance contained in Approved Document B (Volume 2). The quoted version of Approved Document B was published by the United Kingdom's Department for Communities and Local Government in 2006 and has long since been superceded. Nonetheless, those principles contained in that guidance document and used by James M. Briscoe Architect in support of the subject design remain largely valid to this day in terms of demonstrating compliance with Part B to the Building Regulations compliance in England and Wales.
- 6.3 I recognise the fundamental validity of Dublin Fire Brigade's argument that the functional nature of the fire safety objectives set out in the Second Schedule of the Building Regulations 2006 (as amended) allows for the consideration of new hazards due to changes in technology and materials that may not be addressed within the current guidance, such as Technical Guidance Document B (2006) + A1 (2020). In fact, I would go further and state that the obligations arising under the functional requirement approach obliges consideration of such matters and this was amongst the reasons that the

functional requirement approach replaced the previous approach of prescriptive by-laws in the 1990's.

- 6.4 The *de-facto* situation in Ireland is that adoption of those "off-the-shelf" design solutions outlined in Technical Guidance Document B allows designers to claim *prima facie* demonstration of compliance with Part B of the Second Schedule of the Building Regulations. An Bord Pleanála has been consistent in supporting this position in many appeals relating to new or changing fire safety hazards that are not recognised within the guidance contained in Technical Guidance Document B.
- 6.5 Regardless as to whether Lithium-ion batteries represent a new and significant fire hazard as evidenced by Dublin Fire Brigade, the reality is that Technical Guidance B does not directly address the hazard. I therefore believe that any appeal to the Board predicated on such a basis will not be supported and regardless of the merits of any particular case, there is no advantage in seeking to persuade the Board otherwise.
- 6.6 This appeal is therefore considered in the context of the proposed design demonstrating its compliance with Technical Guidance Document B (as the document deemed to demonstrate *prima facie* compliance with Part B to the Building Regulations) and also BS 5588:Part 1:1990 (as the document that could be potentially inferred to similarly demonstrate *prima facie* compliance). For completeness, the proposed design will be also considered in the context of Approved Document B to the Building Regulations (England and Wales) which was relied upon by the appellant to infer compliance of his design with Part B Regulations in this jurisdiction.

Technical Guidance Document B (2006) + A1 (2020)

6.7 Although published in 2020, Clause 1.1.2 of Technical Guidance Document B defers to a British Standard published in 1990, i.e. BS 5588:Part 1, for the design of residential buildings of the type subject of the current appeal, i.e. Purpose Group 1(c). Accordingly, current practice means that designers need not see themselves as being under any obligation to consider any "new" (i.e. those arising within the past 35 years) fire safety hazards that may have manifest themselves due to the manner in which residential

buildings have been constructed, managed or indeed simply lived in. This approach is also despite the fact that BS 5588:Part 1 was superceded by BS 9991 in 2011, which was updated in 2015 and again in 2024 to address new fire hazards such as those identified following the Grenfell Tower disaster.

- 6.8 Despite Technical Guidance Document B not directly addressing the specific issue of protection between storage areas and residential stairways, it does offer guidance on the protection of single stair buildings and the creation of inner rooms, both of which are features of the subject design.
- 6.9 The proposed provision of a ventilated lobby between the bicycle store and the residential stairway together with a unified fire detection and alarm system throughout the building accords with Technical Guidance Document B guidance.
- 6.10 However, Technical Guidance Document B prohibits inner rooms being formed from within a room that is deemed to be a "place of special fire risk". Clause 1.0.9 of Technical Guidance Document B defines "places of special fire risk" to include those places identified in those codes of practice specific to particular building types not within its scope, which in the context of the subject residential building means BS 5588:Part 1:1990. Clause 19.2 of BS 5588:Part 1:1990 defines store rooms as higher fire risk areas and therefore the principles contained in Technical Guidance Document B would not support a design comprising inner rooms accessed solely from within a store room.
- 6.11 Clause 1.4.12(a) of Technical Guidance Document B requires that bin stores should be designed in accordance with BS 5906:1980 which *inter alia* requires that the room be fitted with 0.2 m² permanent ventilation to avoid accumulation of flammable gases from discarded aerosol containers etc. The subject bin store is not itself being provided with any fixed ventilation and in that regard the design does not comply with Technical Guidance Document B.
- 6.12 Clause 1.4.12(c) of Technical Guidance Document B requires that bin stores should be approached by way of a protected lobby fitted with 0.2 m² permanent ventilation. Despite

being fitted with ventilation, the subject bicycle store is not equivalent to a protected lobby due to its potential to be a seat of fire and therefore the design does not comply with Technical Guidance Document B.

BS 5588:Part 1:1990

- 6.13 Clause 14.6.2 of BS 5588:Part 1 requires bicycle stores to be separated from protected stairways by ventilated lobbies (as is proposed in the subject building). Not surprisingly given its date of publication, there is no acknowledgement of any special hazard arising from electrical bicycles, but in any event the worst case scenario envisaged by BS 5588:Part 1 for single stair buildings is connection to a ventilated car park. The highest level of separation proposed within BS 5588:Part 1 includes a maximum of 0.4 m² and the subject building satisfies that provision.
- 6.14 Clause 21.1 of BS 5588:Part 1 prohibits bin stores from being accessed by way of deadend corridors, which by default prohibits access from within dead-end rooms.
- 6.15 Clause 21.2(a) of BS 5588:Part 1 requires that bin stores should be designed in accordance with BS 5906:1980 which *inter alia* requires that the room be fitted with 0.2 m² permanent ventilation to avoid accumulation of flammable gases from discarded aerosol containers etc. The subject bin store is not itself being provided with any fixed ventilation and in that regard the design does not comply with BS 5588:Part 1.
- 6.16 Clause 21.2(b) of BS 5588:Part 1 requires that bin stores should not be located within protected stairways or protected lobbies.
- 6.17 Clause 21.2(c) of BS 5588:Part 1 requires that bin stores should approached only by way of a small protected lobby fitted with 0.2 m² permanent ventilation. The subject design allows for a direct connection between the bin store and the bicycle store and therefore the design does not meet with BS 5588:Part 1 guidance.

Approved Document B (Volume 2) 2006 Edition

- 6.18 Clause 2.21(d) of Approved Document B requires bicycle stores to be separated from protected stairways by ventilated lobbies (as is proposed in the subject building) fitted with 0.4 m² permanent ventilation and the subject building satisfies this provision.
- 6.19 Clause 5.54 of Approved Document B requires that bin stores should be designed in accordance with BS 5906:1980 which *inter alia* requires that the room be fitted with 0.2 m² permanent ventilation to avoid accumulation of flammable gases from discarded aerosol containers etc. The subject bin store is not itself being provided with any fixed ventilation and in that regard the design does not comply with Approved Document B.
- 6.20 Clause 5.55(b) of Approved Document B requires that bin stores should not be located within protected stairways or protected lobbies.
- 6.21 Clause 5.56 of Approved Document B requires that bin stores should approached either directly from fresh air or by way of a protected lobby fitted with not less than 0.2 m² of permanent ventilation. The subject design allows for a direct connection between the bin store and the bicycle store and therefore the design does not meet with Approved Document B.

Conclusions

- 6.22 There are two issues in play here. Firstly, the fact that there is ancillary accommodation comprising both bicycle and bin stores adjacent to the sole means of escape within a small single stair residential building. Secondly, there is the specific issue of the location of an unvented bin store as an inner room to a bicycle store that leads onto the sole exit stairway from a residential building.
 - 6.23 In respect to the presence of a bicycle store in the proposed location, the relevant guidance documents are consistent in their suggesting that the provision of a lobby fitted

with 0.4 m² fixed natural ventilation comprises an acceptable means of ameliorating the risk. Whilst Dublin Fire Brigade are likely correct in their assertion that such an extent of natural ventilation would likely be inadequate in the event of a fire involving an e-bike or e-scooter, no firm evidence has been offered to support that assertion. Even were such evidence available, I think it would be unlikely to sway the Board's policy of endorsing the *prima facie* guidance documents.

- 6.24 Matters are complicated by the fact that "fires" involving batteries are generally not fires at all in the normal meaning of the term. Whilst battery oxidation reactions release large amounts or irritants, toxic gases and heat similarly to conventional fires, they differ in the key regard that they do not require an external oxygen source to sustain themselves nor can they be extinguished by application of water or other traditional fire-fighting media. Lithium-ion batteries can "burn" under water.
- 6.25 Whilst, this reality makes Dublin Fire Brigade's task unenviable and should motivate the building owner's to actively police their prohibition of e-bikes and e-scooters, the point has not yet been reached at a societal level to form a robust basis for an absolute prohibition of indoor bicycle store rooms. Indeed, the lack of a societal response to the very much more serious hazard associated with Lithium-ion batteries in cars, which in case of fire are less easily removed from within buildings than e-bikes, makes a blanket ban on allowing Lithium-ion batteries within Irish buildings unlikely in the foreseeable future.
- 6.26 It is noted that despite the experience of London Fire Brigade as reported by Dublin Fire Brigade in their submission for the subject appeal that the most recent version of BS 9991 (2024), i.e. the modern day equivalent of BS 5588:Part 1, does not impose any additional ventilation requirements on storage areas for bicycles or more specifically in the context of Lithium-ion batteries, storage spaces for mobility scooters.
- 6.26 For understandable reasons that may prove prescient, Dublin Fire Brigade are seeking to impose such a ban on the subject building, which due to their understandable lack of faith in the long-term management of the building, is manifesting itself as a prohibition on the very presence of a store room. This is not sustainable with reference to current guidance

documents that are taken as providing *prima facie* evidence of compliance with Part B to the Building Regulations.

- 6.27 The second issue subject of the appeal regarding the proposed inner room bin store is equally clear-cut in the fact that all of the relevant guidance documents are consistent in their prohibition of the proposed arrangement. Bin stores need to be independently ventilated, accessed via ventilated lobbies that do not form lobbies to single stairways and cannot comprise inner rooms to other store rooms.
- 6.28 My conclusion therefore is that the subject design is deficient but not in the manner argued by Dublin Fire Brigade. The design is not deficient in its provision of a bicycle store room but it is deficient in its provision of an inner room bin store. Condition No. 3 needs to be amended accordingly.

7.0 Recommendations

- **7.1** The appeal against the attachment of Condition No. 3 does not require *de novo* consideration under Article 40(1).
- **7.2** Applying the provisions of Article 40(2), it is recommended that the Board directs Dublin City Council to attach Condition No. 3 as amended below and the reason therefor and for the reasons and considerations set out below:-

Condition No. 3

The proposed Bin Store at Ground Floor Level shall not be permitted.

<u>Reason</u>

To comply with Part B of the Second Schedule to the Building Regulations 1997 to 2022.

8 Reasons and Considerations

8.1 Having regard to the presented design of the extension and material alteration to a previously approved building and the accompanying technical compliance report, to the submissions made in connection with the Fire Safety Certificate application and the appeal, and to the report and recommendation of the reporting Inspector, it is considered that, by reference to the appellant's chosen basis for design BS 5588:Part 1:1990, the Board was satisfied that the Building Control Authority be directed to amend Condition No. 3 and the reason therefor. The Board was further satisfied that, subject to the attachment of the amended Condition No. 3, it has been demonstrated that the subject works, if constructed in accordance with the design presented with the application and appeal, would comply with the requirements of Part B of the Second Schedule to the Building Regulations 1997, as amended.

9 Conditions

8.1 My recommendation is that Condition No. 3 subject of the current appeal be amended as follows:-

Condition No. 3

The proposed Bin Store at Ground Floor Level shall not be permitted.

<u>Reason</u>

To comply with Part B of the Second Schedule to the Building Regulations 1997 to 2022.

10 Sign off

10.1 I confirm that this report represents my professional assessment, judgement and opinion on the matter assigned to me and that no person has influenced or sought to influence, directly or indirectly, the exercise of my professional judgement in an improper or inappropriate way.

Dr. Raymond J. Connolly BE, PhD, CEng, MIEI, MIFireE dated 31st March 2025