



An
Coimisiún
Pleanála

FSC Report

ACP-324068-26

Appeal v Condition	Condition 2 & 4
Development Description	Construction of a Residential Building at Abbey Park, Carrigaline, Co. Cork
Building Control Authority Fire Safety Certificate application number:	FSC2515721CC
Appellant	Mr Kieran Flynn
Appellant's Agent	Maurice Johnson & Partners (MJP)
Building Control Authority:	Cork County Council
Inspector	Des Fortune

Contents

1.0 Introduction	3
2.0 Information Considered	4
3.0 Relevant History/Cases	4
4.0 Appellant's Case	5
5.0 Building Control Authority Case	12
6.0 Assessment	12
7.0 Recommendation.....	18
8.0 Reasons and Considerations.....	18
9.0 Conditions.....	18
10.0 Sign off	18

1.0 Introduction

- 1.1. The application relates to the proposed construction of a seven-storey residential building with retail facilities at Block 1 & 2, Abbey Park, Carriglaine, Co. Cork.
- 1.2. The granted application (FSC2515721CC) is a Fire Safety Certificate application, and the appeal is for Condition 2 and 4 attached to this certificate. These conditions are as follows:

Condition: No. 2

First-aid fire-fighting equipment shall be provided on the premises in accordance with Section 1.4.16 of Technical Guidance Document B 2006. In particular hose-reels confirming to I.S. EN 671-1 shall be installed in the Car Park and in Commercial Unit No. 1 when it is being fitted out.

Reason:

To ensure compliance with Part B1 of the Second Schedule to the Building Regulations 1997 to 2006.

Condition: No. 4

The building shall be provided with an adequate supply of water for fire fighting purposes. In this regard a minimum flow of 35 litres per second for two hours from any one hydrant shall be achieved. In the event that this is not achievable via connection to the public main, a suitable arrangement including a static storage tank of an appropriate size shall be provided on site to the satisfaction of the Fire Authority. Hydrants shall be arranged in a ring main in accordance with I.S. 391: 2020.

Reason:

To ensure compliance with Part B5 of the Second Schedule to the Building Regulations 1997 to 2006.

2.0 Information Considered

2.1. The information considered in this appeal comprised the following:

- Fire Safety Certificate Application (application form, compliance report and fire safety drawings) submitted by MJP, on behalf of Reside Group, dated 26/09/2025.
- Request for further information by Cork County Council dated 04/04/2025.
- Further information submitted by MJP dated 15/12/2025.
- Copy of Cork County Council decision dated 08/01/2026
- Appeal received by the Board submitted by MJP, on behalf of Mr Kieran Flynn, dated 06/02/2026.
- Letter of observations from Cork County Council on appeal dated 18/02/2026
- Letter from MJP, on behalf of Mr Kieran Flynn, dated 08/04/2026.

3.0 Relevant History/Cases

- 3.1. I am not aware of any relevant Building Control history relating to this appeal site. There was no documentation of any previous Fire Safety Certificate (FSC), Revised FSC or any dispensation/relaxation of the Building Regulations (relating to this site) included in the file being reviewed.
- 3.2. According to the appellant, the Board has considered a similar appeal Ref 10.FS.0253.

4.0 Appellant's Case

4.1. The appellant is appealing the attachment of Condition 2 and 4 to the grant of the fire safety certificate on the basis of the following: -

- It is noted that as part of the original FSC application submission it had included provision for commercial sprinklers in accordance with EN 12845: 2015+ A1 2019 to the two storey car park.
- During the process of the Fire Safety Certificate application there was one request for additional/revised information. Items in relation to Condition 2 & Condition 4 were raised as part of the additional information request whereby MJP responded to each item raised.

Condition 2: -

- In relation to Condition 2 regarding hose reels in accordance with IS EN 671-1 to be provided to the car park and the Commercial Unit No. 1, they note the appeal is only in relation to the provision of hose reels in the car park and not the Commercial Unit No. 1.
- The car park levels will be provided with sprinkler protection in accordance with IS EN 12845: 2015 + A1 2019 which is considered a significant enhancement in comparison to fire hose reels. Once activated the sprinkler system will deliver a much more consistent suppression to the fire when compared to a fire hose reel. In comparing a car park with no sprinkler protection with fire hose reels versus a sprinkler protected car park without they postulate the chance of a fire spread from one car to another would be reduced exponentially in the sprinklered scenario. They also note the sprinkler system is automatic whereas a fire hose reel system requires an adequately trained operator.
- They note the Cork County Council's comment regarding the requirements of 1.4.16 of TGD-B 2006, however the introduction to Section 1.4 of TGD-B 2006 + A1 2020 notes the following in Section 1.4.1-"This sub-section deals with a number of provisions about the construction and protection of

escape routes generally, and about some services installations and other matters associated with the design of escape routes". It is their opinion the installation of fire hose reels in the car park which is for residential use and Tesco customers use would not enhance "escape routes" required for these user profiles. As noted in our original letter we are not disputing the requirements of hose reels in the large retail unit. Furthermore, in relation to the requirements of TGD-B 2024 they do not feel this is relevant to this appeal.

- We would note that the car park whilst shared at ground level with the Commercial Unit is predominantly a private residential car park. There will be no training for any of the residents in fire aid firefighting with hose reels. Whilst there will be a large Commercial Unit No. 01 (most likely a Tesco) sharing the ground floor level of the car park it would not be reasonable to expect that their staff would be trained for the use of hose reels in car park fires. If an untrained person were to use a hose reels incorrectly they could exacerbate the situation and cause harm to themselves (i.e. water on an electrical fire). Fire extinguishers along with sprinklers is considered an enhancement on the minimum requirements of TGD-B 2006 + A1 2020.
- As noted in their original submission they are of the strong opinion that an automatic sprinkler system installed to IS EN 12845 is far superior to fixed hose reels. It is noted that TGD-B 2006 states that first aid fire fighting equipment should only be used by "occupants, with appropriate training and where it is safe to do so". The stated reason for Condition 2 in this instance was compliance with B1 of Part B of the Building Regulations. B1 is in respect of "Means of Escape in case of fire" and states "A building shall be so designed and constructed that there are adequate means of escape in case of a fire from the building to a place of safety outside the building, capable of being safely and effectively used". They are of the strong opinion that the design of the car park meets and exceeds the requirements for B1 of the Building Regulations without the inclusion of hose reels as the functional intent of B1 is met by the design. Both levels of the car park (which is fully protected by an automatic sprinkler system)

have multiple escape routes available affording occupants more than adequate means of escape in the event of an evacuation

- It is noted that there is a sleeping risk above however this would be at its most elevated when occupants are generally asleep at night when the Commercial Unit No. 1 would most likely be closed therefore negating any potential benefit of a staff member using the fire hose reels.
- They had previously highlighted a number of points as per bullet points below:
 - The car park will be provided with sprinkler protection in accordance with IS EN 12845 and the retail unit will be only be completed to shell and core with future fitout FSC addressing hose reel provisions where applicable
 - When in use the hose of a hose reel can become a trip hazard for those escaping from the fire. When used in the event of a fire or emergency the hose will remain on the ground creating a trip hazard for those escaping from the fire.
 - The water left on the floor by a hose reel left turned on after the operative has left the scene of the fire can create a slip hazard for all those escaping via that area.
 - Water from the hose reel might not be the appropriate extinguishing method when fighting an electrical fire. Whereas a Powder or CO2 extinguisher are more appropriate.
 - In general, most people have received portable fire extinguisher training and as these have a more intuitive mode of operation, it is more likely that occupants would seek out a portable fire extinguisher in the event of a fire.
 - Portable hand-held extinguishers are quick and easy to use and once they have emptied, if the fire is not under control, there would still be sufficient time for safe escape.

- Staff need to be trained on the use of Hose Reels. It is difficult for Management of such ancillary car parks or the shell and core retail unit to ensure a sufficient number of appropriately trained staff are available on all shifts, as specialist training is required to use hose reels. So, there is a risk that staff trained in the correct use of hose reels may not be available in the event of a fire. Or worse untrained personnel try attempt to extinguish a fire with a hose reel.
- Whether trained in their use or not, occupants may delay in the event of a fire attempting to operate a fire hose reel. This delay may result in there being insufficient time to escape safely.
- It can often be the case that hose reels are over-looked during routine servicing and are generally poorly maintained. They can habitually covered-up or blocked, as they are rarely accessed, and then are typically not readily available for use in the event of a fire.
- Poorly maintained hose reels can lead to the potential production of such infections as legionella (legionnaire's disease) due to the stagnant water. This has the potential to cause the hose reel user (building occupant or fire-fighter) to become ill.
- The assessment of the risk of not providing hose reels in these spaces is considered low risk, given the concerns as outlined above. It is outweighed by the risk of a building occupant delaying to use a hose reel instead of using the time to escape to a place of safety and the trip hazard created by the hose reel.
- Adequate portable fire extinguishers in accordance with IS 291:2015 will be provided in the car park area and the retail unit and these are considered more appropriate in this case, given the nature of the users in the building.

- The assessment of the risk of not providing hose reels in these spaces is considered low risk, given the concerns as outlined above. It is outweighed by the risk of a building occupant delaying to use a hose reel instead of using the time to escape to a place of safety and the trip hazard created by the hose reel.
- They have successfully previously agreed with Cork County Fire Service to omit hose reels in two sprinklered factory buildings where sprinklers had been provided when not required in 2015 and 2018.

On the basis of the foregoing, they submit that Condition 2 is not required for the car park section of the development and they request that An Coimisiún direct Cork County Council to amend the granted Fire Safety Certificate and remove the provision to the car park from Condition 2.

Condition 4: -

- Prior to submission of the FSC CCC advised that they would seek minimum flow of 35 litres per second for two hours be provided to the development or provide a static storage tank to the development. During the course of the application this was raised in the plural by CCC, i.e. confirm hydrants can achieve 35l/s. Following the submission of the FSC our client had a hydrant on the spur road off Pottery Road into the site tested for flow rates. As a result of the test, we had responded to the additional information request in relation to the hydrant flow provision.
- It is proposed to provide six new fire hydrants designed in accordance with IS 391: 2020 within close proximity around the development in addition to the two existing hydrants along Pottery Road and the access road leading to the development. These new hydrants will be provided on a ring main as per the requirement.

- The existing watermain had been tested by SES Water Management and achieved a sustainable flow of 12l/s with a Static Pressure noted of 6.5bar and a dynamic pressure when the hydrant was open of 5.8 bar. This would suggest there is more flow available from the single hydrant and it could be limited by restrictor valves due to the dead end nature of the spur.
- As noted in our original submission we have confirmed an adequate fire flow available from multiple hydrants. We note that a standard pump appliance has an 1,800L tank which would be more than adequate to charge the dry rising main whilst the firefighters connect to additional hydrants. If there is a fire in the lower levels the high pressure hose reel in the appliance delivers a much lower flow rate than 35l/s, i.e. 7l/s which is much less than flow rate from any one hydrant. It is also noted that the car park which is the largest compartment is provided with automatic sprinkler protection therefore affording firefighters time to connect to multiple hydrants.
- There is no flow rate specified in TGD-B 2006 however as noted when tested in 2025 a fire flow from multiple hydrants of 35l/s was available.
- It was noted as part of the additional information response that water flow taken from multiple hydrants and using the Hazen Williams formula for fire flow available from multiple hydrants that the fire flow of 35 litres per second can be achieved using this approach.
- Below is an extract from Section 29 of the Fire Services Act 1981:

Public water supply for fire-fighting.

29.-(1) The functions of a sanitary authority for the provision of a supply of water shall extend to the supply of water for fire-fighting purposes and the

provision and maintenance of fire hydrants at such places as the fire authority requires.

(2) Where a fire authority represents to a sanitary authority that reasonable provision has not been made for a supply of water for fire-fighting purposes, the sanitary authority shall consult with the fire authority as to the measures required and shall take such measures as may be agreed.

- They would be of the opinion that the Act clearly sets out that the sanitary authority (now Irish Water) is required to provide water for fire-fighting purposes. They further note that if the fire authority make representations to the sanitary authority that they need to act upon this request.
- Carrigaline is noted as a growing satellite town in the suburbs of Cork and has grown significantly in the past 10 years. As per the requirements of the Fire Services Act we would argue that the provision of adequate fire fighting water supplies falls with Irish Water rather than our client. It may be a case that Irish Water could also be limiting the flows and would be able to increase the flow in the event of a major event at the Abbey Park site.
- They note that this matter was the subject of an appeal to An Bord Pleanála in January 2005. An Bord directed the condition be removed. The case reference was 10.FS.0253 at an address of Carrigeen National School, Mooncoin, County Kilkenny.
- With the above in mind they request that Condition 4 is altered to remove the reference to the flow rates and static storage tanks.

5.0 Building Control Authority Case

5.1. In response to the appeal of Condition 2 Cork County Council offer the following case:

- It is noted and welcomed that the proposed car-park is being fitted with a sprinkler system to IS EN 12845: 2015+ A1: 2019.
- Section 1.4.16 of TGD B 2006 requires Car Parks and retail where the floor area exceeds 500 square meters to be fitted with hose reels conforming to IS EN 671-1.
- The requirement to provide hose-reels in the above situations has been restated in the latest edition of Technical Guidance Document B-2024.
- The purpose of any sprinkler system is to control fire growth, whereas the purpose of hose reels is to extinguish a fire at its initial stages.
- All first aid fire fighting equipment, including hose reels and extinguishers, need training to be used properly. Appropriate training for both can be offered/provided to residents through the building management company.
- The use of any first aid fire fighting equipment, both extinguishers and hose reels, is based on it only being deployed if it is safe to do so.
- The building management company is required to maintain all fire safety systems in the proposed development, including hose reels.
- Hose reels provide a continuous supply of firefighting water and provide an enhanced extinguishing capability whereas extinguishers will typically be discharged in 30-60 seconds.

5.2. In response to the appeal of Condition 4 Cork County Council offer the following case:

- Flow rates from any one hydrant is the normal way of specifying flow rates for a particular development. This ensures that firefighters can rely on a guaranteed supply from whichever hydrant is immediately usable.
- The development contains apartments at a height in excess of 18m above ground level. 35 liters per second for two hours is a reasonable flow rate for the size and nature of the proposed development.

- The condition allows for any shortfall in supply of 35 liters per second for two hours to be made up by the provision of static storage on site. Such an approach is endorsed by Section 1.17 of Uisce Éireann's Code of Practice for Water Infrastructure.
- It is noted and welcomed that the six new hydrants will be provided on a ring main.

6.0 Assessment

6.1. *De Novo* assessment/appeal v conditions

Having regard to the nature of the appeal which is solely against a condition, 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.

6.2. Content of Assessment

Condition 2

For at least the last 20 years the debate of whether or not fire hoses need to be provided has been made. The arguments put forward by the appellant are typical and in some cases have been successful and sometimes have not. Indeed, in my experience hose reels have been provided less and less. However, with the recent release of TGD-B 2024 this has changed. Cork County Council refers to this in their response and the appellant dismisses it as irrelevant to their application.

However, what is relevant with the inclusion of a recommendation for hose reels in the new TGD-B is that previously the argument could be made that the provision of hose reels was an outdated practice or recommendations that had not kept up with best practice, this is no longer the case. The recommendation for hose reels have been considered, both pros and cons, and they are still recommended in certain circumstances.

It is further noted that the appellant puts a lot of weight on the provision of sprinklers in lieu of hose reels; they state a sprinklered car park is a significant enhancement in comparison to fire hose reels. Once activated the sprinkler system will deliver a much more consistent suppression to the fire when compared to a fire hose reel. In comparing a car park with no sprinkler protection with fire hose reels versus a sprinkler protected car park without they postulate the chance of a fire spread from one car to another would be reduced exponentially in the sprinklered scenario. They also note the sprinkler system is automatic whereas a fire hose reel system requires an adequately trained operator.

However, in these arguments they offer opinions without any facts or supporting quantitative analysis. They may be right in their assumptions, but they don't try to demonstrate / prove them in any way. The obligation is on the appellant to make a case for the removal of the hose reels given that their provision is a prima facie compliance with the Building Regulations. For instance, a fire in a car may be shielded from a sprinkler in the early stages of a fire, has this been considered? How

long will it take for the sprinklers to activate versus the response time for use of the hose reels?

Furthermore, it is noted that in the new TGD-B one of the defining features is the recommendation for the provision of sprinklers. In section 8.3 which details the references of sprinklers, they are referred to in over 27 paragraphs throughout the new document. This is a significant increase on the recommendation of sprinklers in the older versions of TGD-B.

What is particularly relevant to this appeal is the recommendations for building types with both hose reels and sprinklers. For example, a shop compartment over 2000m² is recommended to have both sprinklers and hose reels. The provision of sprinklers in this instance does not offset the provision of hose reels. Another example would be in a high hazard storage warehouse over 1000m², it is recommended to have both sprinklers and hose reels. Again the provision of sprinklers in this instance does not offset the provision of hose reels.

It is also important to point out that the provision of sprinklers does in other instances remove a recommendation. For example, the new external wall fire resistant recommendations for buildings other than residential (care facility) buildings do not apply to sprinklered buildings. This is one of many examples where the provision of sprinklers reduces or removes another recommendation. In other words, the increased recommendation of sprinkler protection has been considered and yet the recommendation for hose reels has remained regardless of the provision of sprinkler protection.

Condition 4

The main trust of the appellant's case is that there are sufficient fire flow rates provided to the site, that the six hydrants combined will provided sufficient flow even if a single hydrant provides less than the recommended. They also believe that the responsibility

for sufficient water flow rates is with the Local Authority and Irish Water. The appellant states that there is no flow rate specified in TGD-B 2006.

Whilst it is noted that TGD-B offers little direct guidance in relation to the water flow rates required or duration of fire-fighting water, it does in section 5.1.8 state the following: -

External Fire Mains

5.1.8 Most urban areas are supplied with water through public water mains. Where such mains are provided it is normal to have hydrants provided for the fire brigade to obtain a ready supply of water for firefighting. The siting of these hydrants is important both from the point of view of accessibility for fire brigade use and proximity to buildings for quick and effective firefighting (see 5.1.7).

The provision of water mains, and suitably located hydrants outside of the site of a building does not come within the scope of the Building Regulations.

In many cases, especially for smaller developments in urban areas, hydrants on public water mains will be adequate. However, for larger buildings, the hydrants available from the public mains outside of the site may not be sufficient for firefighting. In these situations, hydrants on external fire mains within the site of the building will provide the most convenient source of water. This source may be supplemented by hydrants on public mains or other sources indicated at 5.1.6.

Where required to provide hydrants in accordance with 5.1.7, fire mains should be designed to be capable of providing satisfactory flows and pressures. Guidance for the design of hydrant systems is contained in BS 5306: Part 1: 1976. For improved and more reliable supplies, external fire mains on a site should preferably be installed as part of a ring main system.

It is clear from the above that when hydrants are provided in accordance with 5.1.7 (which is the case with this development) then they should be designed to be capable

of providing satisfactory flows and pressure. It then references BS 5306: Part 1: 1976 for the design of hydrant systems.

BS 5306: Part 1: 1976 states the following: -

- When they are considered to be necessary, private fire hydrants should be provided within the confines of the site after consultation with the local water and fire authorities. Their installation should conform generally to this code of practice and also to any specific requirements of these authorities or the insurance company.
- Adequacy of basic supply. In all cases where town's main supply is involved, the capacity of the mains is important and should be checked. Generally a water supply capable of providing a minimum of 25 litre/s (1500 litre/min) at all times will be required.

It is noted that Cork County Council makes the case that flow rates from any one hydrant is the normal way of specifying flow rates for a particular development. This ensures that firefighters can rely on a guaranteed supply from whichever hydrant is immediately usable.

Given the recommendations of TGD-B 2006 (AMD 2020) and the further recommendations of BS 5306: Part 1: 1976 it is reasonable for the Local Authority to request a specific minimum flow from any one hydrant to be achieved. It is noted that a reasonable argument can be made regarding the required flow rate (i.e. reduce from 35l/s to 25l/s) however the appellant has chosen not to make this case.

It is also noted that BS 5306: Part 1: 1976 has been subsequently superseded by BS9990 and more recently Irish Standard IS 391:2020 Fire Mains for Buildings has issued. All of these standards stipulate a "minimum" fire flow rate of 25l/s for hydrant systems. It is noted however that this is identified as a minimum requirement irrespective of buildings size or use and not as a general requirement.

It is noted that I have reviewed appeal Ref 10.FS.0253 and it is unclear how this supports the appellant's case. This appeal was significantly different in context. It included a building under 1000m² that did not need a fire hydrant and was also adjacent an existing public fire hydrant. It did not involve the provision of new fire hydrants.

7.0 Recommendation

- 7.1. On the basis of my assessment, I recommend that the Board deny the appeal on both Conditions for the reasons and considerations set out below.

8.0 Reasons and Considerations

- 8.1. Having regard to the granted Fire Safety Certificate and the appeal, I am of the opinion that the appellant has not demonstrated that there is no requirement for the basement car park to be provided with hose reels to demonstrate compliance with Part B of the Second Schedule of the Building Regulations and therefore Condition 2 should remain.
- 8.2. Having regard to the granted Fire Safety Certificate and the appeal, I am of the opinion that the appellant has not demonstrated that there should be no reference to the flow rates and static storage tanks to demonstrate compliance with Part B of the Second Schedule of the Building Regulations and therefore Condition 4 should remain.

9.0 Conditions

- 9.1. It is recommended that Condition 2 and 4 should remain on the granted Fire Safety Certificate.

10.0 Sign off

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.

Des Fortune

11th June 2026