

By email
13 January 2023

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Dear Madam

Self Storage Facility, Liffey Valley, Dublin 22 Fire Service Access Compliance

This letter details the proposed fire service access compliance in response to item 2(ii) on South Dublin City Councils additional information request dated 9th January 2023.

The basis for compliance to the Building Regulations for the building shall be Technical Guidance Document B 2006 (TGD B). As the height of the buildings top storey exceeds 20m, internal fire fighting shafts including dry internal fire mains will be required in accordance with Paragraph 5.3.2 of TGD B. In accordance with Paragraph 5.2.2 of TGD B, access for a fire pump appliance shall be provided within 18m and within sight of the dry internal fire mains connection points. See attached the relevant guidance extracts for information.

Access for a fire pump appliance is available to the north, south and east of the building within 18m of the building elevations ensuring fire fighting shafts can be located internally within the 18m of a suitable fire pump appliance parking position to achieve the required fire vehicle access compliance.

Regards



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Date

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Schedule 1 – TGD B Extracts

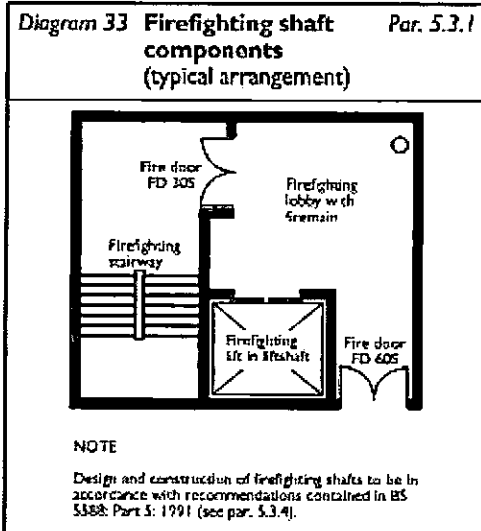
5.3. Personnel Access to Buildings for Firefighting

Introduction

5.3.1 In low rise buildings without deep basements fire service personnel access requirements may be met by a combination of the normal means of escape, and the measures for vehicle access in sub-section 5.2, which facilitate ladder access to upper storeys. In other buildings the problems of reaching the fire, and working inside near the fire, merit the provision of additional facilities to avoid delay and to provide a sufficiently secure operating base to allow effective action to be taken.

These additional facilities include firefighting lifts, firefighting stairways and firefighting lobbies, which are combined in a protected shaft known as the firefighting shaft (Diagram 33).

Provisions for protected shafts in general are given in Section B3.



Provision of Firefighting Shafts

5.3.2 Buildings with a floor at more than 20 m above ground level or with a basement at more than

10 m below ground level, should be provided with firefighting shafts containing firefighting lifts

Every firefighting stairway and firefighting lift should be approached through a firefighting lobby (see Diagram 33).

A firefighting stairway should serve every storey of the building.

A firefighting lift should serve every storey above ground, including the ground floor, in a building with any floor 20 m or more above ground. However a firefighting lift need not serve a storey in a building used as flats (purpose group 1(c)) on which there is no entrance to a dwelling. A firefighting lift should also serve every storey below ground, and the ground floor, in a building with a basement at more than 10 m below ground.

Number and Location of Firefighting Shafts

5.3.3 The number of firefighting shafts should:

- (a) (if the building is fitted throughout with an automatic sprinkler system meeting the relevant recommendations of BS 5306: Part 2) comply with Table 5.3; or
- (b) (if the building is not fitted with sprinklers) be such that there is at least one for every 900 m² (or part thereof) of floor area of the largest floor that is more than 20 m above ground level.

The location of firefighting shafts should be such that every part of every storey, other than fire service access level, is no more than 60 m from the entrance to a firefighting lobby, measured on a route suitable for laying hose. If the internal layout is unknown at the design stage, then every part of every such storey should be no more than 40 m in a direct line from the entrance to a firefighting lobby.

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5.2. Vehicle Access

Introduction

5.2.1 Fire brigade vehicle access to the exterior of a building is required to enable high reach appliances, such as turntable ladders and hydraulic platforms, to be deployed, and to enable pumping appliances to supply water and equipment for firefighting.

Access requirements increase with building size and height and also depend on whether the building is fitted with internal fire mains (see 5.1).

Access for fire appliances should be provided in accordance with the provisions outlined in 5.2.2 below.

Vehicle access routes and hard-standings should meet the criteria described in 5.2.4 if they are to be used by fire service vehicles.

Provision of Vehicle Access

5.2.2 For effective firefighting operations, fire brigade appliances should be able to get within easy reach of a building. For small buildings it is generally only necessary to have access to one external elevation, but larger buildings will require access to all or a number of elevations.

Vehicle access should be provided in accordance with the criteria indicated in Table 5.1. Any elevation to which vehicle access is provided in accordance with Table 5.1 should contain a door giving access to the interior of the building.

In the case of a building fitted with a dry internal fire main, access for a pump appliance should be provided to within 18 m and within sight of the inlet connection point.

In the case of a building fitted with a wet internal fire main, access for a pump appliance should be provided to within 18 m and within sight of an entrance giving access to the main and within sight of the inlet connection to the suction tank for the main.

In the case of a building which has adjoining buildings on one or more sides, the perimeter (see 5.0.4 and Diagram 31 for the definition of 'perimeter') which is

available to provide access is less than for a free-standing building. Where there are adjoining buildings on more than two sides, the access requirement derived from Table 5.1 may not therefore be adequate. In these situations it may be appropriate to consult with the relevant fire authority in relation to access and other facilities or compensating features as are considered necessary.

In the provision of access for fire appliances, consideration should also be given to the position of any hydrants required by reason of the criteria outlined in 5.1.

Existing Buildings

5.2.3 In the case of existing buildings, where access for fire appliances is not in accordance with the provisions outlined at 5.2.2, it is appropriate to consider a range of compensating measures, depending on the circumstances of each particular case. Such measures could include additional personnel access (see 5.3) to the building for firefighting, additional internal fire mains (see 5.1) and other facilities to assist firefighting.

In the case of an existing small building, with a total floor area of up to 1000 m² where the height of the top storey is under 10 m, access for fire service pump appliances should generally be provided to within 45 m of the principal entrance to the building.

In large or complex buildings it will be necessary to provide access to within a reasonable distance of a number of points on the exterior and to within a reasonable distance of other entry points to the building. In these cases it may be appropriate to consult with the relevant fire authority in this regard.