



***Fire Engineering Consultants***

**Appeal Against Conditions attached to  
Fire Safety Certificate (FA/15/1601)**

**Appeal Ref: 29B. FS0525**

**Project                      Nursing Home at Former Smurfit  
Kappa Site, Tonlegee Road,  
Coolock, Dublin 5**

**Local Authority          Dublin City Council**

**Date                              20<sup>th</sup> June 2016**

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## 1.0 INTRODUCTION

The project involves the construction of a nursing home consisting of 149 bedrooms and ancillary spaces at the former Smurfit Kapa Site, Tonlegee Road, Coolock, Dublin 5.

A Fire Safety Certificate application for the works was granted by Dublin City Council on the 3<sup>rd</sup> March 2016. The following conditions were attached:-

### Condition 1

Provide a sprinkler system in accordance with I.S. EN 12845: 2015 Fixed firefighting systems – Automatic sprinkler systems – Design, installation and maintenance with the special requirements for life safety systems in accordance with LPC Rules for Automatic Sprinkler Systems.

Or

Provide a Category 3 sprinkler system in accordance with BS 9251: 2014 Fire sprinkler systems for domestic and residential occupancies – Code of practice, together with the special requirements for life safety systems in accordance with LPC Rules for Automatic Sprinkler Systems incorporating I.S. EN 12845:2015. The minimum duration of supply for the combined stored water capacity for the system to be 60-minutes.

**Reason:** To comply with **Part B1** of the Second Schedule to the **Building Regulations, 1997 to 2014**.

### Condition 2

Provide self-closing devices for bedroom fire doorsets or equal equivalent (free swing closers or care free plus closers or similar)

**Reason:** To comply with **Part B1** of the Second Schedule to the **Building Regulations, 1997 to 2014**.

### Condition 3

Provide smoke activated fire resisting dampers for ventilation ductwork in addition to being thermally activated where the ductwork penetrates compartmentation construction or fire resisting construction.

**Reason:** To comply with **Part B1** of the Second Schedule to the **Building Regulations, 1997 to 2014**.

### Condition 4

Nurses station at ground floor level situated between Gridlines 1 & 2 and B & C to be enclosed with 30 minutes fire resistance construction complete with a self closing FD30s fire doorset.

**Reason:** To comply with **Part B1** of the Second Schedule to the **Building Regulations, 1997 to 2014**

### Condition 5

The kitchen cooking equipment and associated extract ductwork to be installed in accordance with NFPA (National Fire Protection Association) 96: "STANDARD FOR VENTILATION CONTROL AND FIRE PROTECTION OF COMMERCIAL COOKING

OPERATIONS" or equivalent standard. The cooking equipment and associated ductwork to be protected by an approved wet chemical extinguishing system in accordance with: NFPA 17a: "STANDARD FOR WET CHEMICAL EXTINGUISHING SYSTEMS 2009 EDITION", (or equivalent standard) and to be interfaced with the electrical/fuel supply systems (to shut off on activation) and also with the fire detection and alarm system. In addition suitable heat detection to be provided in the extract ductwork. The ductwork to be cleaned at regular intervals (as recommended by HVCA TR / 17: GUIDE TO GOOD PRACTICE: CLEANLINESS OF VENTILATION SYSTEMS" (or equal approved) to avoid grease build up and associated filters to be replaced as required. A suitably located "Lock Stop" (electrical knock off) switch to be provided for manually isolating any gas and electrical supply in the kitchen area. The equipment to be satisfactorily tested and listed in accordance with UL 300: "STANDARD FOR FIRE TESTING OF FIRE EXTINGUISHING SYSTEMS FOR PROTECTION OF COMMERCIAL COOKING EQUIPMENT". Maintenance testing and inspection details to be recorded in the fire safety register.

**Reason:** To comply with **Part B1** of the Second Schedule to the **Building Regulations, 1997 to 2014**

Conditions 1 (sprinklers) and Condition 4 (enclosure of nursing station) are the subject of this appeal.

## 2.0 INFORMATION REVIEWED

In assessing this appeal the following information was considered:-

- Fire safety certificate application including
- Drawings submitted 22<sup>nd</sup> December 2015
  - Urban PLACE Map
  - Proposed Site Plan
  - Proposed Ground Floor Plan
  - Proposed First Floor Plan
  - Proposed Second Floor Plan
  - Proposed Roof Plan
  - Proposed Elevations and Sections
- Drawings submitted 25<sup>th</sup> February 2016
  - Proposed Ground Floor Plan
  - Proposed First Floor Plan
  - Proposed Second Floor Plan
  - Proposed Elevations and Sections
- Additional information submission dated 25 February 2016
- Fire Safety Certificate grant dated 3<sup>rd</sup> March 2016
- Appeal submission from G Sexton & Partners dated 31<sup>st</sup> March 2016
- Fire Officers Report on Fire Safety Certificate appeal dated 19<sup>th</sup> April 2016
- Response to Fire Officers Report letter from G Sexton & Partners dated 4<sup>th</sup> May 2016

### **3.0 DISCUSSION**

#### **3.1 Condition No. 1**

The BCA have put forward an argument that the guidance in Building Regulations Technical Guidance Document B in relation to new residential care homes is 10 years old and is outdated. This argument is substantiated by:-

1. Research carried out by the BRE in 2004 which concluded that sprinklers in care homes were probably cost effective. The Scottish Technical Standards were subsequently revised to require sprinklers in these buildings, driven by the Rose Park Care Home fire disaster. In addition to this the BRE carried out a further cost benefit analysis for the Welsh Assembly which reached a similar conclusion and result in sprinklers being required in care homes from April 2014.
2. DFB concerns about the particular problems with evacuating residential care homes due to the nature of the occupancy requiring assistance to escape.
3. DFB concerns that current TGD B guidance for care homes relies solely on passive fire protection measures. They quote statistics from PD7974-Part 7:2003 which suggests fire resisting doorsets could fail to act in 40% of installations.

The appellants response is that Approved Document B (England and Wales) and Technical Booklet E (Northern Ireland) were revised in 2012 and 2013 and no requirement for sprinklers in residential care homes was included in either.

The have summarised the holistic fire strategy for the building including concrete construction, compartmentation, L1 Automatic fire detection, progressive horizontal evacuation, staff training, compliant travel distances and adequately sized exits. Automatic hold open devices on doors will also prevent them from being wedged open by occupants and staff. They contend that the building is essentially fully compliant with the guidance in the current TGD B without the provision of sprinklers.

This is the most important point. The current primary guidance document for fire safety in Ireland is the Technical Guidance Document B 2006. Whilst I would share the BCA's concerns that the guidance in much of this document is outdated, presently compliance with the guidance in TGD B demonstrates prime facia compliance with Part B of the Second Schedule of the Building Regulations.

TGD B is currently under revision, however it has been since 2012. Designers cannot be expected to incorporate measures which may or may not be included in a future version of the guidance and are entitled to design to the current minimum standards. On the same note, local authorities cannot enforce their own standards and must adhere to the nationally approved standards. When the draft TGD B is issued for comment, BCA's will have the opportunity to reinforce their concerns by making submissions on the inclusion of sprinklers in care homes. One would then assume that a cost benefit analysis for the Irish market will be carried out and if deemed appropriate the requirement for sprinklers will be incorporated. Until such time as this due process is complete the current minimum standards in TGD B do not require sprinklers in residential care homes in Ireland.

### **3.2 Condition No. 4**

The main concern the BCA had with the nurse's station is that it resulted in the bedrooms becoming inner rooms which does not comply with the guidance in TGD B. They note that the appellant as part of the appeal submitted a revised design which dealt with their concerns but that as a material alteration would require a revised Fire Safety Certificate application.

As part of the submission the appellant submitted a revised design which addressed the issue of inner rooms. They contend in their second submission that this could be dealt with not by means of a revised Fire Safety Certificate but by a rewording of the condition. I would agree with this conclusion.

## 4.0 RECOMMENDATIONS

The BCA should be directed to remove condition 1.

Condition 4 should be revised to read as follows:

The layout of the ground floor should be revised to ensure that bedrooms 12, 13, 14, 15 and 16 are not inner rooms to the Nurses Station situated between gridlines 1 & 2 and B & C.

Reason: To comply with Part B1 of the second schedule to the Building Regulations, 1997 to 2014.

Signed.....  
Martin Davidson  
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Date: 20 June 2016