



Validation Assessment for Building Regulations Fire Safety on Higher Risk Buildings

SAMPLE EXAM QUESTIONS

Updated June 2021

Changes to examination format as of October 2020

Following feedback from previous candidates and a full scheme review by the Building Regulations Fire Safety on Higher Risk Buildings Scheme Committee we have revised the format of the examination.

The review took note of feedback regarding the time allocation for each section of the examination, plus an analysis of what we are testing and the percentage of the examination allotted to specific areas of competency. This provided us with an objective measure of the application or use of knowledge, skills, and abilities required to successfully perform critical work tasks in a defined work setting.

The review concluded that the previous format was a robust measure of competence, although the percentage allocation for the testing of knowledge needed to be lowered in favour of the application of knowledge, skills, and abilities gained through experience. As such, the closed book multiple-choice element has been removed. The validation will now take the form of a three-hour open-book examination - the table below provides a brief overview of the changes.

Previous Examination Format (<i>examinations sat before October 2020</i>)	New Examination Format (<i>examinations sat after October 2020</i>)
Section 1: Multiple Choice Closed book 1 hour 40 multiple choice questions. One mark for each correct response. Knowledge of Fire Safety legislation and regulations <p style="text-align: right;">33.3% of total marks</p>	3-hour open book examination Structured in 3 sections Section 1: Short Answer Questions 10 short answer questions One mark for each correct response. Knowledge of Fire Safety legislation and regulations <p style="text-align: right;">8.3% of total marks</p>
Section 2: Technical Questions Open book (current associated legislation). 2 hours Divided into four different parts, with each part having a maximum of 20 marks. Each part of section 2 focuses on one of the specific topic areas set out in the core competency criteria. <u>Application of knowledge</u> Skills / Experience Abilities <u>Ethics & Professional Behaviour</u> <p style="text-align: right;">66.7% of total marks</p>	Focusing on specific topic areas set out in the core competency criteria. Application of knowledge Skills / Experience Abilities Ethics & Professional Behaviour *See Core Competency sections <p style="text-align: right;">83.4% of total marks</p> Section 3: Short Answer Questions 10 short answer questions One mark for each correct response. Knowledge of Fire Safety legislation and regulations <p style="text-align: right;">8.3% of total marks</p>

PLEASE NOTE: Candidates should always check in advance of their examination which version of ADB and associated legislation should be referenced to avoid any confusion over transitional provisions. Typically, this will be the most recent version as soon as it has taken effect.

Marks can be obtained from any section of the examination – no minimums are set at section level.

Results provided will be either PASS or REFERRED

Sample Question 1 – Short Answer (1 mark)

What is meant by AWFSS?

Sample Question 2 – Short Answer (1 mark)

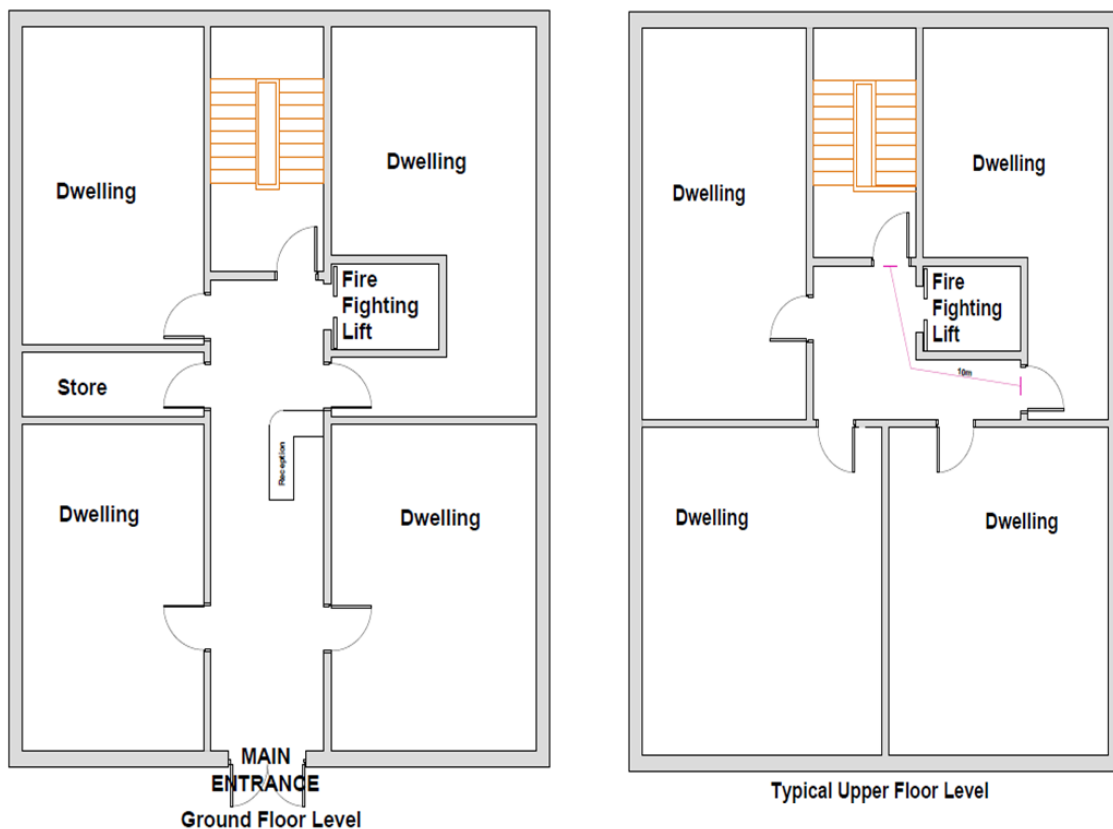
What standard applies to the external fire spread classification for roofs?

Sample Question 3 – Essay (20 marks)

One of your regular Building Control clients has sent through the attached layout plans of a typical upper floor and ground floor (entry level) for a proposed 10-storey building containing flats in England. The client would like an indication if the means of escape to the common parts is in accordance with the Building Regulations.

Please list any amendments/comments that would need to be made for the means of escape to be satisfactory.

Please also advise on the rating of any fire doors and the areas that would need to be covered by emergency lighting.

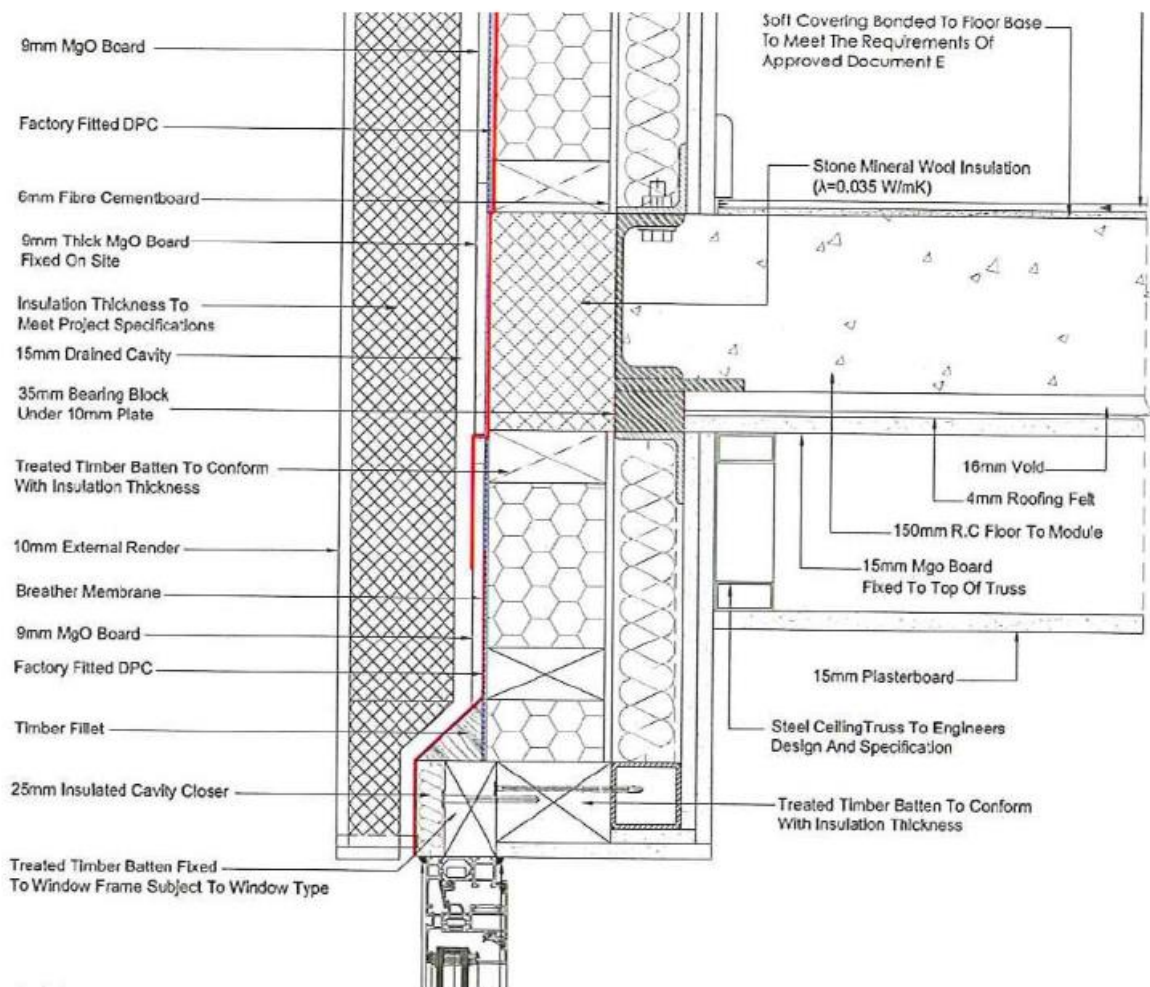


Sample Question 4 – Essay (16 marks)

There is a proposal for a new hotel building that has a height of 28m. The Building Control team has received the section below of the proposed external cladding system to a steel framed building.

List the points that you would make at the plan check stage under B4 external fire spread. (9 marks)

Explain what elements of the external wall will be checked by Building Control on site and what will be included in the site inspection framework. (7 marks)



Sample Question 1 - Model Answer

Automatic Water Fire Suppression System (sprinklers) **(1 mark)**

Sample Question 2 - Model Answer

BS EN 13501-5 **(1 mark)**

Sample Question 3 – Model Answer

1. Generally following guidance in ADB Volume 1 clause 3.25, 3.26 and 3.27 with diagram 3.7 and subsequent references **(1 mark)**
2. Option 1 Flats at ground floor entered only externally. The means of escape route at ground floor level therefore becomes part of the stair enclosure **(3 marks)**
3. Option 2 protected lobby ground floor with FD30s doors and 1.5m² vent **(3 marks)**
4. Options 3 have direct escape to outside air from staircase enclosure at ground floor level. Would mean that door between stair and corridor at ground floor level is either blocked or is a FD30s door and 1.5m² ventilation provided to ground floor hallway **(3 marks)**
5. Emergency lighting in stair **(1 mark)**
6. Emergency lighting in corridor/lobby **(1 mark)**
7. Reception not allowed **(1 mark)**
8. Store not allowed **(1 mark)**
9. Staircase vent 1.0m² **(1 mark)**
10. Upper floor(s) move door to within 7.5m (15m if using guidance in BS 9991) of stair entrance **(2 marks)**
11. Fire doors shown as FD30s **(1 mark)**
12. 1.5m² ventilation to lobbies of upper floors **(2 marks)**

Sample Question 4 – Model Answer

Plan Check Assessment: (9 marks)

1. Request BR 135 report based on test to BS 8414:2
2. Or check external wall system under ADB volume 2 12.5 to 12.8
3. Request the full specification
4. All insulation/fillers should be A2-s3, d2 or better

5. External surfaces above 18m should be class B-s3, d2 or better
6. Cavity barriers to be in accordance with ADB volume 2 Section 9 based on the class of material exposed in the cavity
7. Check that the details of the external wall are like the BR 135 report and test
8. If boundary distance is less than 1000mm all external surface should be class B-s3, d2 or better
9. Mention of fire resistance of external walls and allowable unprotected areas

Site Inspection Framework: (7 marks)

1. Ensure competence of Building Control Officer undertaking the inspection
2. Check on products to ensure there is no substitution
3. Check fixing details
4. Check cavity barriers
5. Check on dimensions of cavities
6. Check quality of workmanship
7. Points about stage of inspection and frequency of inspection