



# **REGISTERED ARCHITECTURAL IRONMONGER**

**2010**

**COMPULSORY COURSE WORK**

## **A STANDARDS UPDATE SECURITY, ACCESSIBILITY & ESCAPE**

Reg AI No.....

## INTRODUCTION

This paper is the compulsory course work for 2010 and has a value of 4 CPD points towards your total. Your completed answers should be sent to the Guild offices for assessment by 31 October 2010. You are strongly advised to retain a photocopy in case papers are lost in transit.

The course work is designed to test your current knowledge and also bring it up to date. We suggest that the following resources should be helpful:

- IAI CPD meeting
- GAI Manuals. These are available using your Reg AI log in - [www.gai.org.uk](http://www.gai.org.uk).
- Code of Practice: Hardware for fire and escape doors – [www.firecode.org.uk](http://www.firecode.org.uk)
- ADB (free download)
- PAS 23/24
- Door manufacturers – their manuals and websites.
- Secured by Design
- AIJ 133 Spring '09 Letters from Andrew Hall, President and technical article by Graham Hulland – [www.gai.org.uk](http://www.gai.org.uk)
- GAI Technical Update No. 7 June 2009 – available on GAI website

Where answers are handwritten, please ensure that they are legible and that any technical terms are spelt correctly.

Where illustrations would assist in clarifying an answer, they can be photocopied from manufacturer's information (not from the GAI manual) or drawn by hand – as long as the point being made is clear and any labeling is legible!

**It is recognised that many work together with others in their research for this work. However, it is essential that you demonstrate that your submitted work is your own.**

If you have any queries please contact the Guild office.  
The Guild of Architectural Ironmongers  
8 Stepney Green  
LONDON E1 3JU

# A STANDARDS UPDATE

## SECTION 1 - SECURITY

### Question 1

- a) Can components of a doorset claim compliance with PAS 23 & 24? Give the reason for your answer.
- b) Suggest 2 items which an ironmonger might supply for use on or immediately adjacent to a PAS 23/24 front doorset, which are not included in the scope of the PAS.
- c) What are the criteria that you should consider for adding items to a PAS doorset?
- d) The lever handle set for a PAS 23/24 doorset must have certain properties to help the doorset fulfil the requirements of the PAS's. Please give brief details of how the lever set can assist security in PAS 24, and how it might influence endurance in PAS 23.

### Question 2

Write a specification for the ironmongery to suit a timber door in a timber frame, for use as the front door of an apartment on the second floor of a block of flats. The door is rated FD30. There is no entry-phone system, and deliveries will be made to individual flats.

### Question 3

An architect asks your advice about improving security on a block of flats. There is a lift serving all floors. The corridors leading from the lift lobbies have fire doors at both ends – giving access to the lift lobby at one end, and the escape stairs at the other.

With regard to the following requirements provide suggestions to the architect making it clear how each aspect is covered:

- a) improving secure access whilst still allowing escape
- b) cutting down on people needing access
- c) allowing tenants to screen caller

## **SECTION 2 – ACCESSIBILITY**

### Question 4

The revision to ADB published in 2006 made two significant changes to the requirements for closers on fire doors in dwellings and flats.

- a) What are the two changes?
- b) What new fire protection measure allowed the change to internal doors?
- c) Will the change apply retrospectively to dwellings and flats granted planning permission before 2007?

### Question 5

BS 8300:2009 recommends limitations on the opening resistance of door closing devices.

- a) What are the limitations?
- b) What types of door closing device could you offer at the specification stage which would be guaranteed to give easy access to all after installation?
- c) Even the most efficient door closer cannot be guaranteed to offer access compliant with BS 8300 once it is incorporated into a doorset on site. What factors might lead to a need to increase closing force on the closer, and therefore the opening resistance of the doorset?

### Question 6

BS 8300:2009 gives revised dimensions for fixing heights. Please give the latest recommendations for the following:

- a) height of lever furniture
- b) height for lower end of pull handle
- c) minimum height for the upper end of a pull handle.

### Question 7

- a) What is wrong with the statement “DDA compliant” when attached to individual items of ironmongery such as lever furniture and lockcases?
- b) What would be a more accurate claim?
- c) What statement does the GAI recommend for door closing devices?

## **SECTION 3 – ESCAPE DOOR HARDWARE**

### Question 8

- a) What type of product would you specify to satisfy a requirement for entry by electronic access control with internal manual over-ride, and panic escape in a fire emergency?
- b) What are the two draft European standards which cover these types of emergency exit devices?

### Question 9

- a) In 2008, BS EN 179 was re-issued with two major revisions. One of these related to door opening direction. What is now accepted in the standard, which was not previously accepted?
- b) The other revision also affects BS EN 1125, and relates to Outside Access Devices. What changed in the revision with regard to OADs?

**Send your work for assessment by 31 October 2010 to:**

**The Guild of Architectural Ironmongers  
8 Stepney Green  
LONDON  
E1 3JU**

**Don't forget to retain a copy**