

# TEST REPORT



**Title:** UAP Letterplates – Evaluation to EN  
13724:2013

**Report Number:** WTE-C-004-Ea

**On behalf of** UAP Limited  
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## Introduction

It was requested that WTE Ltd carry out an ongoing series of evaluations of the UAP letterplates to EN 13724:2013. The letter plate was classified as Type 4 according to the standard. The results are presented below.

It was requested that evaluation to cl: 5.3.5 (fire protection) should not be carried out at this time.

## Samples

The following samples of the UAP Letterplate were supplied:

Item Number	Number
FMB1224SA	1
FMS1248S	1
I Plate	2
FMB1224W	1
FMB1224G	1

All tests were carried out on the FMB1224, FMB1248 and I Plate  
Corrosion tests only were carried out on the remainder of the samples as they were functionally similar to those already tested.

Samples were supplied on 22 April 2014

A further sample of FMB1224G was supplied on 5 June 2014.

Photographs of these samples are shown in Appendix A.

## Results

The letter plates were evaluated in accordance with EN 13724: 2013 Type 4 letterplates. The references below refer to the respective clauses of that standard.

## 5.1 Components

Fixing instructions shall be supplied with each individual product enabling the correct installation in accordance with this standard.

Fitting instructions for all products were supplied in accordance with the standard.

The aperture shall be fitted with a flap.

FMB1224	The aperture was fitted with a flap both internally and externally.
FMS1248	The aperture was fitted with a flap both internally and externally.
I Plate	The aperture was fitted with a flap both internally and externally.

## 5.2 Dimensions

Internal dimensions of the aperture

	Length	Height	Classification
FMB1224	241	31	2
FMS1248	254	33	2
I Plate	241	24	Unclassified

### 5.3.3 Gauge Mail

It shall be possible to push gauge mail through the aperture without folding or damaging it.

**Gauge 1 (flexible)** (size 229mm x 324mm x 24mm thick). The envelope shall be filled with 210 mm x 297 mm papers with a mass per area of 80 g/m<sup>2</sup>

**Gauge 2 (solid)** 138 mm x 225 mm x 20 mm;

Gauge 2, 3 and 4 shall be made of an inflexible material, with a tolerance of  $\pm 0.2$  mm.

	Gauge 1	Gauge 2
FMB1224	Pass	Pass
FMS1248	Pass	Pass
I Plate	Pass	Pass

### 5.4.1 Installation height of aperture

The information stated under 5.4.1 shall form part of the installation instruction.

*For ergonomic reasons the lower edge of the lowest aperture and the upper edge of the highest aperture should be at a height between 700 mm and 1 700 mm measured from the delivery floor level.*

*In special cases such as groups of apertures or in historical buildings with limitations the range may be extended but should be between 400 mm and 1 800 mm*

Fitting instructions for all products were supplied in accordance with the standard.

### 5.4.2 Safety

To avoid injuries, all components that can be reached when inserting or removing a letter post item shall not have sharp edges.

FMB1224	Pass
FMS1248	Pass
I Plate	Pass

### 5.4.3 Opening force of the flap

	Internal Flap	External Flap
FMB1224	3.6	3.6
FMS1248	2.9	2.4
I Plate	1.6	1.7

The standard states that these values shall not exceed 8N

### 5.4.4 Closing of Flap

The flap shall be self-closing after a letter post item has been inserted both before and after the corrosion evaluation.

	Before Corrosion	After Corrosion
FMB1224	Pass	Pass
FMS1248	Pass	Pass
I Plate	Pass	Pass

### 5.4.5 Fire protection

The letterplate was not evaluated against local planning laws and building regulations as part of this work.

### 5.6.1 Corrosion

The letterplates were evaluated to EN 1670:2006 grade 3 (96 hours). Results were as follows:

FMB1224	Red corrosion on screws (non significant surface).	Pass
FMS1248	Red corrosion on screws (non significant surface).	Pass
I Plate	Red corrosion on screws (non significant surface).	Pass

### 5.6.2 Water penetration

A water penetration test was carried out in accordance with the standard (Spray test to Figure 2).

FMB1224	There was no penetration of water through the letterplate assembly.	Pass
FMS1248	There was no penetration of water through the letterplate assembly.	Pass
I Plate	There was no penetration of water through the letterplate assembly.	Pass

### 5.7.3 Type 4 theft prevention

The following requirements shall form part of the installation instructions;

*“If the distance between the bottom of the aperture and the receiving floor level is at least 680 mm, the maximum aperture height may be 40 mm and a security attachment shall not be required. For distances less than 680 mm, the aperture shall be provided with a security attachment, as shown in Figure 2c), which makes access to and removal of letter post item(s) more difficult.*

*Failure to comply with these installation requirements shall result in non-conformity with this standard.”*

Fitting instructions for all products were supplied in accordance with the standard.

#### 5.7.5 Protection against opening of doors and windows – type 4

The following requirements shall form part of the installation instructions:

*“a letterplate shall not be fitted within 400mm of a door or window lock unless an auxiliary locking device is also fitted more than 400mm from the letterplate. If the door or window can be locked from the inside with a key and the key withdrawn, these requirements do not apply. If a box is placed behind the letter plate, it shall meet all the requirements for types 1, 2 and 3.*

*Failure to comply with these installation requirements shall result in non-conformity with this standard.”*

Fitting instructions for all products were supplied in accordance with the standard.

## 5.7.6 Security Type 4

### Fixings

Letter plates shall be supplied with fixings which, once installed, cannot be removed from the outside.

FMB1224	Pass
FMS1248	Pass
I Plate	Pass

The fixings shall remain intact when tested in accordance with 6.7.6.1 and 6.7.6.2. After the tests according to 6.7.6.1 and 6.7.6.2 the permanent deformation shall not be more than 2 mm for both grades.

If the aperture required in the door is in excess of 30mm, the letter plate requires a load of 0.5kN applied for 10 seconds. The load of 0.5 kN shall be reached within 2 s and held for 10 s. The test shall be performed at each end of the frame

If the aperture required in the door is in excess of 40mm, the letter plate requires a load of 1.2kN applied for 10 seconds. The load of 1.2 kN shall be reached within 2 s and held for 10 s. The test shall be performed at each end of the frame

	Door Aperture	Load Applied	Permanent Deformation	
FMB1224	39	0.5	0.2	Pass
		0.5	0.2	Pass
FMS1248	44	1.2	0.1	Pass
		1.2	0.2	Pass
I Plate	42	1.2	0.4	Pass
		1.2	0.6	Pass
		1.2	0.5	Pass
		1.2	0.4	Pass

Note: Where there is more than one fixing at each end of the letterplate EN 13724 is unclear on load application. The load might be applied to all fixings at one end or each fixing at one end. In this instance, for the I Plate, the worst case was chosen and the load was applied individually to each fixing each end of the letterplate.

## Flap

If the aperture behind the flap is in excess of 40mm, the letter plate requires a load of 1.0kN applied to each pivot of each flap. The load shall be continuously increased up to 1.0 kN. The load shall be applied without shock to the flap, such that the force acts directly in shear with the pivot pin. The load of 1.0 kN shall be reached within 2 s and held for 10 s. The test shall be performed at each pivot pin (see Figure 10).

The test shall be carried out for both inward and outward opening flaps.

	Aperture	
FMB1224	28	No Test
FMS1248	33	No Test
I Plate	24	No Test

## Deflector

The letter plate deflector shall be in accordance with 6.7.6.4 (note EN 13724 has incorrect clause number).The load shall be continuously increased up to 1.2 kN. The load shall be applied without shock to the letter plate deflector, such that the force acts directly in shear with the pivot pin. The load of 1.2 kN shall be reached within 2 s and held for 10 s. During and after the test according to 6.7.6.3 the deformation shall not be more than 2 mm.

The letter plate deflector can be adjustable, but then it shall not be possible to move the lower edge of the letter plate deflector to a position higher than the lower edge of the aperture.

If a letter plate deflector is installed, it shall still be possible to insert all gauge postal items (as mentioned in 5.3.3) through the aperture without damaging it.

FMB1224	No deflector fitted
FMS1248	No deflector fitted
I Plate	No deflector fitted



## 7.0 Marking and labelling

If a manufacturer or trade mark owner claims that a product conforms to this standard, the manufacturer's name or the trade mark shall be included on the marking of the product in addition to the information given in Table 1.

Stickers shall be put on the type 4 apertures to give hints to customers that, when using letter plates, there is a risk that they might be used for fishing, identity theft or arson.

	Name / Trademark	Table 1	Type 4 Sticker
FMB1224	Pass	Pass	Pass
FMS1248	Pass	Pass	Pass
I Plate	Pass	Pass	Pass

## Summary

An evaluation of the UAP Letterplates was carried out in accordance with EN 13724:2013 (type 4, letter plates).

It was requested that evaluation to cl: 5.4.5 (fire protection) should not be carried out at this time. We have been informed that this aspect of the standard has been evaluated separately.

### **FMB1224**

Pass to EN 13724:2013.

### **FMS1248**

Pass to EN 13724:2013.

### **I Plate**

The aperture height was 24mm, the minimum permitted by the standard is 30mm.

The letterplates met all other requirements of the standard.



Report authorised by:

Dr Martin White  
Director

Date: 6 June 2014

**REPORT ENDS**

## Appendix A – Photographs



Letterplate FMB1224



Letterplate FMS1248



Letterplate I Plate

## Appendix B – Marking and Labelling Guidance

EN 13724:2013 states

### 5.4.1 Installation height of aperture

The information stated under 5.4.1 shall form part of the installation instruction. Failure to comply with the installation requirements shall result in non-conformity with this standard.

*For ergonomic reasons the lower edge of the lowest aperture and the upper edge of the highest aperture should be at a height between 700 mm and 1 700 mm measured from the delivery floor level.*

*In special cases such as groups of apertures or in historical buildings with limitations the range may be extended but should be between 400 mm and 1 800 mm*

### 5.7.3 Theft prevention - type 4

The following requirements shall form part of the installation instructions (see also Table A.1 and Figure 2):

*If the distance between the bottom of the aperture and the receiving floor level is at least 680 mm, the maximum aperture height may be 40 mm and a security attachment shall not be required.*

*For distances less than 680 mm, the aperture shall be provided with a security attachment, as shown in EN 13724 which makes access to and removal of letter post item(s) more difficult.*

*Failure to comply with these installation requirements shall result in non-conformity with EN 13724.*

### 5.7.5 Protection against the opening of doors and windows - type 4

The following requirements shall form part of the installation instructions:

*A letter plate shall not be fitted within 400 mm of a door or window lock unless an auxiliary locking device is also fitted more than 400 mm from the letter plate. If the door or window can be locked from the inside with a key and the key withdrawn, these requirements do not apply.*

*If a box is placed behind the letter plate, it shall meet all the requirements for EN 13724 types 1, 2 and 3.*

*Failure to comply with these installation requirements shall result in non-conformity with EN 13724.*

## 7. Marking and labelling

If a manufacturer or trade mark owner claims that a product conforms to this standard, the manufacturer's name or the trade mark shall be included on the marking of the product in addition to the information given below (from Table 1).

Standard		EN 13724
Type	4	4: letter plate
Size	2	2: aperture for lengthwise posting
Corrosion resistance	3	3: high corrosion resistance
Theft and burglar resistance	0	0: no prevention

Stickers shall be put on the type 4 apertures to give hints to customers that, when using letter plates, there is a risk that they might be used for fishing, identity theft or arson.