Project Reference: 4791323332
Report Number: 4791323332-1
Issue Date: 29th August 2024

UL Technical Assessment Report of fire resistance performance of previously tested timber-based door assemblies, when fitted with the Codelocks range of locks, latches and keypads, in accordance with EN 1634-1: 2014 + A1: 2018.

Report Prepared for:

Codelocks International Ltd.
Albury Way
Newbury
Great Britain

This report has been prepared by Sajith Menon, Project Engineer, in full accordance with the PFPF standard procedures guidance, (as outlined in the 2021 edition of 'Guide to undertaking technical assessments of fire performance of construction products based on test evidence') and in line with the principles of EN 15725: 2010.

Contents

Client Name: Codelocks International Ltd.
Date of Report: 28th August 2024

Introduction

This report relates to a request from Codelocks International Ltd. to undertake an assessment of the likely fire resistance performance of range of Codelocks locksets, keypads when tested as part of a timber-based door assembly in accordance with EN1634-1: 2014 + A1: 2018.

The request to assess was for the following reason/s:

- Provide a scope of use for the tested Codelocks products with, previously proven, timber based doorsets required to provide fire resistance performances of up to 60 minutes.

- By comparison with the tested models, provide a scope of use for alternative Codelocks products with, previously proven, timber based doorsets required to provide fire resistance performances of up to 60 minutes.

The proposed doorsets are required to satisfy the integrity criteria, and where applicable the insulation criteria, of EN 1634-1: 2014 +A1: 2018 for periods of up to 30 and 60 minutes.

Definition

In accordance with the PFPF guide – **Undertaking Technical Assessments of Fire Performance of Construction Products Based on Fire Test Evidence** the definition used for the scope of this report is as follows.

'A technical evaluation of the likely performance of a component or element of structure (as defined in Approved Document B for England and Wales or their equivalent in Scotland and Northern Ireland) if it were subject to a standard fire test.

An assessment may consider design changes to a tested element of construction for a specific project, or it could form a wider scope of approval with a defined period of validity

Assessments are based on sufficient relevant test evidence and provide a defined scope of approval for a particular design or range of designs and is an opinion of the likely performance of a component or element if it were subject to a standard fire test'.

For the purpose of this assessment the level of complexity is defined as –

Intermediate Assessment

The assessment of intermediate complexity and significant changes to a tested product or system. Such changes may be critical to the fire performance of the product or construction being assessed.

Client Declaration

During the application process the client, Codelocks International Ltd., has confirmed in writing the following:

"All information submitted as evidence to UL is accurate and complete, and to the best of our knowledge, contains all pertinent test evidence and reports even those which may be detrimental to the outcome of the technical assessment.

Although previous testing has been carried out, the configuration of the test specimens in the most recent fire testing had not been carried out in the same manner as previously."

All information and evidence provided is accurate and reflects exactly the product or system which is subject to assessment. All information relevant to the assessment; references, drawings technical specifications, photographs and test/certification reports have been made available to the UL assessor; including any test failures and any information/evidence which they are aware of which may be unfavourable to the assessment outcome.

The client has confirmed that to their knowledge the product or system has not been tested in the configuration (or similar) they are seeking an assessment on.

The original application declaration is kept on file for reference.

UL Declaration

UL have agreed to undertake this assessment based on the client's supplied information and their declaration confirming full disclosure of information. UL have reviewed the application and have completed an impartiality assessment. This report therefore represents an independent expert opinion, which has not been influenced by any commercial, financial, or other pressures, that could compromise impartiality.

Assumptions

It is assumed that the doorsets to which the discussed Codelocks products may be fitted, shall be previously tested and proven in the required single-action, single-leaf configuration and for the required period of fire resistance performance, having demonstrated their capability of providing either 30- or 60-minutes integrity and, where applicable, insulation.

In all cases, the doorsets shall be previously proven, in terms of the required level of fire resistance performance, when fitted with similarly mounted lock/latch assembly and, therefore, are also proven when incorporating similarly sized and positioned cutouts to the door leaf and frame to those needed for the installation of the Codelocks products.

The purpose of this assessment is to consider the use of the Codelocks products in terms of their suitability for use in previously proven timber based doorsets, therefore the scope of this report is limited only to doorsets satisfying the above criteria.

Doorset constructions will be installed in a similar manner to that detailed in the relevant test reports, and by competent installers. Door leaf to frame clearance gaps can have a significant effect on the overall fire performance of a doorset, it is therefore assumed that the leaf to frame clearance gaps will not exceed those measured for the relevant fire tested doorset. In addition, it is assumed that the door leaves will be in the closed and latched position. The Codelocks products shall be fitted in accordance with the manufacturer's instructions.

The proposed doorsets will include a surface mounted overhead door closer capable of returning the door leaf to the fully closed position and overcoming any resistance from the latch mechanism.

Installation of a lock/latch into the edge of a door leaf and the corresponding strike plate to the door frame invariably requires the interruption of the doorset's standard intumescent seal specification. The amount of interruption should be replicated or reduced from that originally recorded for the tested doorset and lock case.

Proposal

It is proposed that a scope of use for the tested Codelocks products, when included in alternative, previously proven timber based doorsets may be given, where the doorsets are required to provide fire resistance performances of 30 and 60 minutes, as relevant to the doorset construction.

It is additionally proposed that other, alternative Codelocks latches and keypads may also be considered as suitable for use with, previously proven, timber based doorsets required to provide fire resistance performances of 30 and 60 minutes. Suitability of these alternative models will be determined by comparison with the tested models.

Primary Test Evidence

The test report referenced **FPA 105786 r1** details a fire resistance test conducted on two identical timber based single-leaf, single-acting doorsets, one opening in towards the furnace, the other opening away. The doorsets were of a 60 minute rated construction comprising a nominally 54mm thick door leaf mounted within a hardwood timber frame.

Each doorset was installed with:

1. Codelocks PMLB 60/8 tubular latch with Codelocks CL5010 electronic digital lock
2. P251 LB60 tubular latch with Codelocks CL2255 electronic digital lock
3. P525 ML55 DIN Sash lock with Codelocks CL5520 smart digital lock.

On both Doorset A and Doorset B, the tubular latch – PMLB 60/8 was latched and had a latch engagement of 9mm, whereas the tubular latch P251 LB60 and the sash lock P525 ML55 were disengaged for the purpose of the test.

For each installation, the lock/latch body was provided with intumescent protection in the form of 1mm thick Interdens intumescent sheet wrapping the lock/latch body, behind the forend and behind the strike plate, with the exception that, a 2mm thickness was used behind the strike plate for P525 ML55 sash lock. Graphite tubes supplied by Lorient of nominal thickness between 1.4mm to 1.8mm thick were used for the fixing bolts and electrical cables.

The doorsets demonstrated their ability to provide integrity and insulation performances of 64 minutes. The test was terminated at 68 minutes.

The test report referenced **FPA 105785 r1** details a fire resistance test conducted on two identical timber based single-leaf, single-acting doorsets, one opening in towards the furnace, the other opening away. The doorsets were of a 30 minute rated construction comprising a nominally 44mm thick door leaf mounted within a softwood timber frame.

Each doorset was installed with:

1. PMLB 60/8 tubular latch with Codelocks CL5010 electronic digital lock.
2. P251 LB60 tubular latch with Codelocks CL2255 electronic digital lock.
3. P525 ML55 Din Sash lock with Codelocks CL5520 smart digital lock.

On both Doorset A and Doorset B, the tubular latch – PMLB 60/8 was latched and had a latch engagement between 9.4 and 10.2mm, whereas the tubular latch P251 LB60 and the sash lock P525 ML55 were disengaged for the purpose of the test.

For each installation, the lock/latch body was provided with intumescent protection in the form of 1mm thick Interdens intumescent sheet wrapping the lock/latch body, behind the forend and behind the strike plate. Graphite tubes supplied by Lorient of nominal thickness between 1.4mm to 1.8mm thick were used for the fixing bolts and electrical cables.

The doorsets demonstrated the ability to provide integrity and insulation performances of 36 minutes. The test was terminated at 36 minutes.

In both tests, only the tubular latch - PMLB 60/8, used in conjunction with CL5010, was engaged and was the only means of latching each doorset. This model was chosen as it was considered to represent the most onerous case.

Assessment

Based on the details of the tests conducted, a high level of confidence can be taken in the proposed use of the tested products in alternative timber based doorset constructions. A determination of compatible doorsets is detailed in the Suitable Doorsets section of this report.

Details of the required intumescent protection to be fitted with the assemblies is given in the Suitable Doorsets section.

Alternative Models:

A review of the door preparation requirements for the whole range was made and the models - CL5010, CL5520 and CL2255 were selected for testing. Their selection was on the basis that they were representative of all other models and included the most onerous installation requirements in terms of the number, and size, of holes required to be cut through the door leaf for the follower, fixing holes and cableways

The below diagrams show details of the door preparation required for the of the CL5010, CL5520 and CL2255 models.

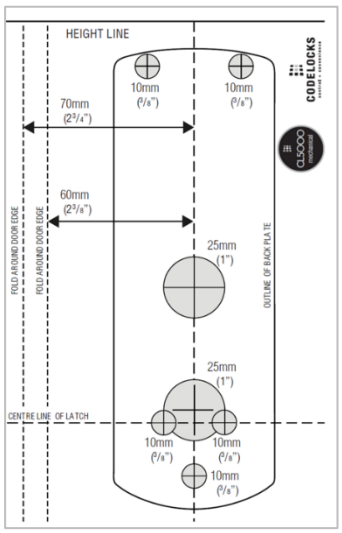

Figure 1: For CL5010

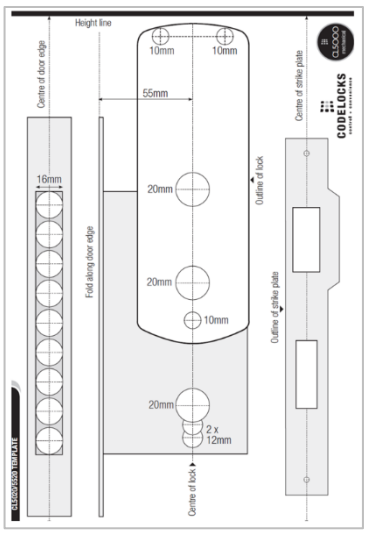

Figure 2: For CL5520

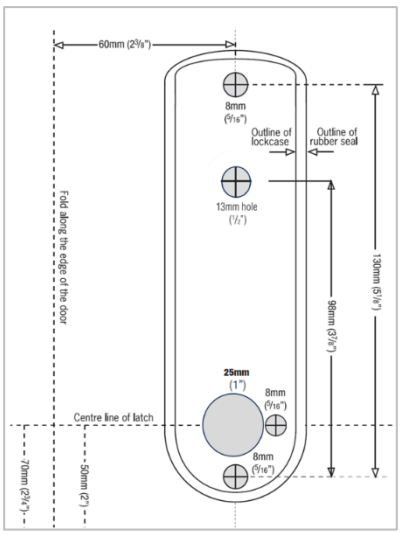

Figure 3: For CL2255

The CL5010 was tested in conjunction with PMLB 60/8 tubular latch, CL5520 was tested in conjunction with P525 ML55 DIN sash lock and CL2255 tested in conjunction with P251 LB60 and all arrangements have been shown to demonstrate a positive contribute towards the performance of doorsets for 30 and 60 minutes. It is therefore reasonable to conclude that, based on their comparison with the tested models, the models listed in the tables in Annex C have been positively appraised.

Alternative Latches:

The PMLB 60/8 and P251 LB60 tubular latches were included in both tests and were shown to contribute positively towards the performance of the doorsets. Variants of these latches are the PMLB 70/8 and P251 LB70. These are identical in construction and design to the respective tested models, but have an increased backset of 70mm. Effectively, this increases the overall length of the latch by 10mm. In terms of fire performance, the minimal increase in door preparation, i.e. 10mm deeper morticing, is negligible and would not be detrimental to performance. Therefore, the use of PLMB 70/8 and P251 LB70 tubular latches can be positively appraised.

Alternative Intumescent Kit Supplier:

It is also proposed that the intumescent kits from the current supplier may be replaced with kits from a new supplier. In general, the physical material from both suppliers is identical, comprising both 1mm and 2mm Interdens to protect the lock bodies and to back their strike plates. There is a difference between the two intumescent kits in that the graphite tubes (used for fixing bolts and electrical cables) are a different material. Data for the reaction/expansion of the graphite material from the new supplier has been provided and this is considered to have adequately confirmed the suitability of the material in the specified applications it is to be used. Therefore, the use of the intumescent kits from a new supplier can be positively appraised.

Suitable doorsets

Within the scope of this report, it is intended that the proposed lockset assemblies may be used with doorsets other than those included in the original tests. To enable the report's use on a general basis, and avoiding restriction of it to specific manufacturers' doorsets, or doorset type, the following requirements are given to ensure that the locksets are used only with appropriately proven doorsets:

The timber based doorset including its door frame, intumescent seals and any other installed ironmongery shall have achieved the appropriate 30 or 60 minute fire resistance performance when tested to EN 1634-1: 2014 + A1: 2018 by a suitably accredited laboratory. Within the UK this would be a laboratory accredited by UKAS for the test method.

Those aspects of the doorset construction considered critical to its performance are the material of the door frame, the door leaf to frame clearance gaps and the lipping material. Close attention must be paid to these details, and they should not be altered from that previously tested. To ensure compatibility of the doorset construction with the scope of use given in this report for the locks, the following minimum specification must be followed:

- Door frame density – 500kg/m^3 (30 minutes), 650 kg/m^3 Hardwood (60 minutes)
- Leaf to frame clearance gaps not to exceed 3 mm average and 3.5 mm maximum
- Door leaves must be lipped with hardwood, minimum 10 mm thick – density 650 kg/m^3 (30 and 60 minutes)
- Door leaf thickness – 44 mm (30 minutes), 54 mm (60 minutes)

Use of the keypads and lock/latches shall only be considered where the proposed doorset has demonstrated the required performance when fitted with a similarly sized and positioned lockset and the amount of interruption of the standard intumescent seal specification at the door leaf to frame perimeter clearance gaps can be replicated or reduced from that originally included in the tested assembly.

In both 30 minute and 60 minute door applications, the keypads and lock/latchsets must be installed with the requisite intumescent protection which is:

- 1 mm thick Interdens intumescent sheet wrapping the lock case and behind the forend
- 2 mm thick Interdens behind the strike plate for 60 minutes door and 1mm thick Interdens behind the 30 minutes door.
- Graphite intumescent tubes installed as directed in the manufacturer's installation instructions.

Test evidence for the proposed doorset must be appropriate to the scope of doorset configuration considered by this report which is single-action, single-leaf only.

Conclusion

From the above discussion, it can be concluded that the range of Codelocks locks, latches and keypads, as detailed in Annex C of this report, may be installed into previously successfully tested 30 minutes and 60 minutes timber doorsets and would be expected to contribute positively towards the overall fire resistance performance of the doorset, if tested in accordance with EN1634-1: 2014+ A1: 2018.

Limits of Applicability

This assessment does not constitute product certification by UL and should not be used to demonstrate compliance where the project requires product certification.

UL Confirmation of Validity

This assessment is issued based on the test data and information to hand at the time of issue. If contradictory evidence becomes available to the assessing authority, the assessment will be unconditionally withdrawn, and the applicant will be notified in writing. Similarly, the assessment should be re-evaluated, if the assessed construction is subsequently tested, since actual test data is deemed to take precedence.

This assessment is valid for an initial period of five years (if the clause above is not enacted) after which time it is recommended that it be submitted to the assessing authority for re-evaluation.

This report may only be used in its entirety and should be supplied to interested parties or AHJ's as such.

NB This assessment report is not valid unless it incorporates all pages and the declaration duly signed by the applicant's representative.

Signatories

Engineer Completing the Assessment on behalf of UL.

Name of Engineer	Signature	Date
Sajith Menon		29th August 2024
Name of Reviewer	Signature	Date
Danny Forshaw		29th August 2024

Annex A - Primary Evidence no. 1 referred to

Lab: Fire Protection Association (FPA)
Report Number: FPA 105786 r1

Fire resistance test in accordance with EN 1634-1: 2014 + A1: 2018 on two identical timber based single leaf, single acting doorsets, one opening in towards the furnace, the other opening away. The overall dimensions of each door leaf were 827 x 2040 x 54mm (w x h x thk). Each door leaf was provided with hardwood lippings to its vertical edges and was mounted within a hardwood door frame. Each door leaf was hung within the frame on three steel hinges and included three keypad locks installed in conjunction with three locks/latches. Each doorset was installed with:

Unit 1: Codelocks PMLB 60/8 tubular latch with Codelocks CL5010 electronic digital lock.
Unit 2: P251 LB60 tubular latch with Codelocks CL2255 electronic digital lock.
Unit 3: P525 ML55 Din Sash lock with Codelocks CL5520 smart digital lock.

The follower height of unit 1 was 900mm from the sill, of unit 2 was 1150mm from the sill and the unit 3 was 900mm from the sill.

E & I_2 results for Doorset A:

E	Sustained flaming:	64 minutes
	Gap Gauge:	64 minutes*
	Cotton pad:	64 minutes**
Insulation (I_2):		64 minutes***

E & I_2 results for Doorset B:

E	Sustained flaming:	68 minutes*
	Gap Gauge:	68 minutes*
	Cotton pad:	68 minutes*
Insulation (I_2):		68 minutes*

*No failure recorded at the time of test termination.
**by virtue of sustained flaming.
***by virtue of integrity.

Test Date: 13th March 2024
Report Date: 23rd April 2024
Test Sponsor: Codelocks International Ltd.

Annex B – Primary Evidence no. 2 referred to

Lab: Fire Protection Association (FPA)
Report Number: FPA 105785 r1

Fire resistance test in accordance with EN 1634-1: 2014 + A1: 2018 on two identical timber based single leaf, single acting doorsets, one opening in towards the furnace, the other opening away. The overall dimensions of each door leaf were 927 x 2040 x 44mm (w x h x thk). Each door leaf was provided with hardwood lippings to its vertical edges and mounted within a softwood door frame. Each door leaf was hung within the frame on three steel hinges and included three keypad locks installed in conjunction with three locks/latches. Each doorset was installed with:

Unit 1: Codelocks PMLB 60/8 tubular latch with Codelocks CL5010 electronic digital lock.
Unit 2: P251 LB60 tubular latch with Codelocks CL2255 electronic digital lock.
Unit 3: P525 ML55 Din Sash lock with Codelocks CL5520 smart digital lock.

The follower height of unit 1 is 900mm from the sill, of unit 2 is 1150mm from the sill and the unit 3 is 900mm from the sill.

E & I_2 results for Doorset A:

E	Sustained flaming:	36 minutes*
	Gap Gauge:	36 minutes*
	Cotton pad:	36 minutes*
Insulation (I_2):		36 minutes*

E & I_2 results for Doorset B:

E	Sustained flaming:	36 minutes*
	Gap Gauge:	36 minutes*
	Cotton pad:	36 minutes*
Insulation (I_2):		36 minutes*

*No failure recorded at the time of test termination.

Test Date: 12th March 2024
Report Date: 23rd April 2024
Test Sponsor: Codelocks International Ltd.

Annex C – Assessed products and assemblies

*Codelocks keypads, lock/latch configurations and intumescent kits:

Product Range	Product Code	Description	P251 LB 60	P251 LB70	PMLB 60/8	PMLB 70/8	P525 ML 55	Fire Kit Product Code
Mechanical	155	155 Mechanical Mortice Latch	X	X				PFKPLAT
Mechanical	160	160 Mechanical Mortice Latch Quick Code	X	X				PFKPLAT
Mechanical	190	190 Mechanical Mortice Latch Back to Back	X	X				PFKPLAT
Mechanical	255	255 Mechanical Mortice Latch	X	X				PFKPLAT
Mechanical	0255 KEY	255 Mechanical Mortice Latch Key Override	X	X				PFKPLAT
Mechanical	290	290 Mechanical Mortice Latch Back to Back	X	X				PFKPLAT
Mechanical	0290 BB Key	290 Mechanical Mortice Latch Back to Back Key Override	X	X				PFKPLAT
Mechanical	410	410 Mechanical Mortice Latch			X	X		PFKPLAT
Mechanical	0410 BB	410 Mechanical Mortice Latch Back to Back			X	X		PFKPLAT
Mechanical	415	415 Mechanical Mortice Latch			X	X		PFKPLAT
Mechanical	420	420 Mechanical Mortice Lock					X	PFKP DIN
Mechanical	425	425 Mechanical Mortice Lock					X	PFKP DIN
Mechanical	510 Key	510 Mechanical Mortice Latch with Key Override			X	X		PFKPLAT
Mechanical	515 Key	515 Mechanical Mortice Latch with Key Override			X	X		PFKPLAT
Mechanical	0510 BB	510 Mechanical Mortice Latch Back to Back			X	X		PFKPLAT
Mechanical	510	510 Mechanical Mortice Latch			X	X		PFKPLAT
Mechanical	515	515 Mechanical Mortice Latch			X	X		PFKPLAT
Mechanical	520	520 Mechanical Mortice Lock					X	PFKP DIN
Mechanical	525	525 Mechanical Mortice Lock					X	PFKP DIN
Mechanical	610	610 Mechanical Mortice Latch			X	X		PFKPLAT
Mechanical	0610 BB	610 Mechanical Mortice Latch Back to Back			X	X		PFKPLAT
Mechanical	615	615 Mechanical Mortice Latch			X	X		PFKPLAT
Mechanical	0615 BB	615 Mechanical Mortice Latch Back to Back			X	X		PFKPLAT
Mechanical	620	620 Mechanical Mortice Lock					X	PFKP DIN
Electronic	2255	2255 Electronic Mortice Latch	X	X	X	X		PFKPLAT
Electronic	4010	4000 Electronic Mortice Latch			X	X		PFKPLAT
Electronic	4020	4000 Electronic Mortice Lock					X	PFKP DIN
Electronic	4510 BLe	4510 Electronic Bluetooth Low Energy Mortice Latch			X	X		PFKPLAT
Electronic	4520 BLe	4520 Electronic Bluetooth Low Energy Mortice Lock					X	PFKP DIN
Electronic	4510 CC	4510 Electronic Codelocks Connect Mortice Latch			X	X		PFKPLAT
Electronic	4520 CC	4520 Electronic Codelocks Connect Mortice Lock					X	PFKP DIN
Electronic	5010	5000 Electronic Mortice Latch			X	X		PFKPLAT
Electronic	5020	5000 Electronic Mortice Lock					X	PFKP DIN
Electronic	5510 BLe	5510 Electronic Bluetooth Low Energy Mortice Latch			X	X		PFKPLAT
Electronic	5510 CC	5510 Electronic Codelocks Connect Mortice Latch			X	X		PFKPLAT
Electronic	5520 Ble	5520 Electronic Bluetooth Low Energy Mortice Lock					X	PFKP DIN
Electronic	5520 CC	5510 Electronic Codelocks Connect Mortice Lock					X	PFKP DIN

*Complete kit assemblies (inc. keypads, lock/latch and intumescent kit):

Product Range	Product Code	Description
Fire Kits - Included	0155 FKP	155 MECHANICAL Mortice Latch Hold open, Fire Kit
Fire Kits - Included	0160 FKP	160 MECHANICAL Mortice Latch Quick Code, Fire Kit
Fire Kits - Included	0255 KEY FKP	255 MECHANICAL Mortice Latch Key Override, Fire Kit
Fire Kits - Included	0255 FKP	255 MECHANICAL Mortice Latch Hold open, Fire Kit
Fire Kits - Included	0410 FKP	410 MECHANICAL Tubular Mortice Latch, Fire Kit
Fire Kits - Included	0415 FKP	415 MECHANICAL Tubular Mortice Latch Passage Set, Fire Kit
Fire Kits - Included	0420 FKP	420 MECHANICAL with Anti-Panic Mort.Lock D/Cyl, Fire Kit
Fire Kits - Included	0425 FKP	425 MECHANICAL with Anti-Panic Mort.Lock D/Cyl Passage, Fire Kit
Fire Kits - Included	0510 FKP	510 MECHANICAL Tubular Mortice Latch, Fire Kit
Fire Kits - Included	0515 FKP	515 MECHANICAL Tubular Mortice Latch Passage Set, Fire Kit
Fire Kits - Included	510 Key FKP	510 Mechanical Mortice Latch with Key Override, Fire Kit
Fire Kits - Included	515 Key FKP	515 Mechanical Mortice Latch with Key Override, Fire Kit
Fire Kits - Included	0520 FKP	520 MECHANICAL with Anti-Panic Mort.Lock D/Cyl, Fire Kit
Fire Kits - Included	0525 FKP	525 MECHANICAL with Anti-Panic Mort.Lock D/Cyl, Fire Kit
Fire Kits - Included	0610 FKP	610 MECHANICAL Tubular Mortice Latch, Fire Kit
Fire Kits - Included	0615 FKP	615 MECHANICAL Tubular Mortice Latch Passage Set, Fire Kit
Fire Kits - Included	0620 FKP	620 MECHANICAL Anti-Panic Mortice Lock, Fire Kit
Fire Kits - Included	2255 FKP	CL2255 ELECTRONIC Tubular Mortice Latch, Fire Kit
Fire Kits - Included	4010 FKP	CL4000 ELECTRONIC Tubular Mortice Latch, Fire Kit
Fire Kits - Included	4020 FKP	CL4000 ELECTRONIC Anti-Panic Mortice Lock D/Cyl, Fire Kit
Fire Kits - Included	4510 Ble FKP	CL4510 ELECTRONIC Bluetooth Low Energy Mortice Latch, Fire Kit
Fire Kits - Included	4520 Ble FKP	CL4520 ELECTRONIC Bluetooth Low Energy Mortice LOCK, Fire Kit
Fire Kits - Included	5010 FKP	CL5000 ELECTRONIC Tubular Mortice Latch PVD, Fire Kit
Fire Kits - Included	5020 FKP	CL5000 ELECTRONIC Anti-Panic Mortice Lock D/Cyl, Fire Kit
Fire Kits - Included	5510 Ble FKP	CL5510 ELECTRONIC Bluetooth Low Energy Mortice Latch, Fire Kit
Fire Kits - Included	5520 Ble FKP	CL5520 ELECTRONIC Bluetooth Low Energy Mortice LOCK, Fire Kit
Fire Kits - Included	4510 CC FKP	4510 Electronic Codelocks Connect Mortice Latch, Fire Kit
Fire Kits - Included	4520 CC FKP	4520 Electronic Codelocks Connect Mortice Lock, Fire Kit
Fire Kits - Included	5510 CC FKP	5510 Electronic Codelocks Connect Mortice Latch, Fire Kit
Fire Kits - Included	5520 CC FKP	5510 Electronic Codelocks Connect Mortice Lock, Fire Kit

**Note:*

(i) Products are also available in BK (Black), MG (Marine Grade), SS (Stainless Steel), SG (Silver Grey), PB (Polished Brass), BS (Brushed Steel) finishes.

(ii) Product specifications such as BB (Back-to-Back), PK (Panic Kit) and KEY (Key Override) are also available.

Annex D– Declaration by the Applicant

Reference No. 4791323332-1

We the undersigned confirm that we have read and complied with the obligations placed on us by the

Passive Fire Protection Forum (PFPF)

Guide to undertaking technical assessments and engineering evaluations based on fire test evidence

2021

Industry Standard Procedure

We confirm that any changes which are the subject of this assessment have not to our knowledge been tested to the standard against which this assessment has been made.

We agree to withdraw this assessment from circulation should the component or element of structure, or any of its component parts be the subject of a failed fire resistance test to the standard against which this assessment is being made.

We understand that this assessment is based on test evidence and will be withdrawn should evidence become available that causes the conclusion to be questioned. In that case, we accept that new test evidence may be required.

We are not aware of any information that could affect the conclusions of this assessment. If we subsequently become aware of any such information, we agree to ask the assessing authority to withdraw the assessment.

(in accordance with the principles of FTSG Resolution 82)

Signature: Paul Campbell

Name: Paul Campbell

Position: Technical, Quality and Sustainability Manager

Company: Codelocks International Ltd

Date: 29th August 2024