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Testing. Advising. Assuring.

**Title:**

The Fire Resistance  
Performance Of Timber And  
Steel Based Doorsets When  
Fitted With ASSA ABLOY  
OneSystem Locks

**Report No:**

357877

**Prepared for:**

**ASSA ABLOY  
Sicherheitstechnik  
GmbH**

Bildstockstr. 20  
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**Date:**

22<sup>nd</sup> October 2015

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## Executive Summary

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<b>Objective</b>	This report considers the fire resistance performance of single-acting, insulated timber based doorsets, or steel based doorsets when fitted with ASSA ABLOY OneSystem locks.
<b>Report Sponsor</b>	<b>ASSA ABLOY Sicherheitstechnik GmbH</b>
<b>Address</b>	Bildstockstr. 20 72458 Albstadt Germany
<b>Summary of Conclusions</b>	Should the recommendations given in this report be followed, it can be concluded that the ASSA ABLOY OneSystem locks as detailed within this report may be fitted to previously tested or assessed (by Exova Warringtonfire) timber based doorsets to provide 30 or 60 minutes integrity performance, or steel based doorsets to provide up to 240 minutes integrity performance, without detracting from the overall performance of the doorset, with respect to EN 1634-1 or BS 476: Part 22: 1987.
<b>Valid until</b>	1 <sup>st</sup> November 2020

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## Introduction

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This report presents an appraisal of the fire resistance performance of single-acting timber, or steel based doorsets when fitted with a range of ASSA ABLOY OneSystem locks. The doorset, onto which the proposed hardware is to be fitted, may be of single-leaf or double-leaf configuration.

The proposed doorsets are required to provide a fire resistance performance of up to 60 minutes integrity performance for timber based doorsets, and up to 240 minutes integrity performance for steel based doorsets, with respect to EN 1634-1 or BS 476: Part 22: 1987.

### FTSG

The data referred to in the supporting data section has been considered for the purpose of this appraisal which has been prepared in accordance with the Fire Test Study Group Resolution No. 82: 2001.

## Assumptions

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### Doorset Specification

It is assumed that the lockset will be fitted to a doorset which has also been previously shown to be capable of providing the required fire resistance performance when tested in accordance with EN 1634-1 or BS 476: Part 22: 1987 in the proposed configuration i.e. single-leaf or double-leaf.

It is also assumed that the doorsets will fully comply with any certification scope or assessed modifications, apart from the modifications specified in this report.

### Latching

Where a lock considered by this report does not incorporate a self latching mechanism e.g. deadlocks and dead bolts, then either the lock must be engaged or the doorsets must have been proven for the required period without the restraint of a latch/lock.

### Supporting wall

It is also assumed that the construction of the wall, which supports the proposed doorsets, will have been the subject of a separate test and the performance of the wall is such that it will not influence the performance of the doorset for the required period.

### Installation

It is assumed that the doorsets will be installed in a similar manner to that of the previously tested assembly by competent installers.

### Clearance gaps

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 leaf and 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 position and latched.

## Proposals

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It is proposed that the ASSA ABLOY OneSystem locks, as referenced within this report, may be fitted into a previously tested (in accordance with EN 1634-1 or BS 476: Part 22: 1987) or assessed (by Exova Warringtonfire) timber based doorsets which have been shown to be capable of providing 30 or 60 minutes integrity performance, or steel based doorsets which have been shown to be capable of providing up to 240 minutes integrity in the same configuration as that proposed i.e. single-leaf or double-leaf.

Details of the range of locks is included in Annex A of the report

## Basic Test Evidence

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### WF Report No. 352046

The fire resistance performance of two specimens of single-acting, single-leaf timber doorsets, both incorporating various items of building hardware in accordance with BS EN 1634-1:2014.

For the purposes of the test, the doorsets were referenced Doorset A and Doorset B.

Briefly both Doorsets had overall nominal dimensions 2090 mm high by 1012 mm wide incorporating a door leaf with overall dimensions 2040 mm high by 933 mm wide. Doorset A was 44 mm thick and Doorset B was 54 mm thick. The door leaves were of a solid graduated density chipboard construction, with 8 mm hardwood lippings to the vertical edges. The 30 minute door was hung within a softwood frame and the 60 minute door was hung within a hardwood frame. Both doorset were hung on three UNION ASSA ABLOY stainless steel hinges

**Doorset A** was installed with a UNION ASSA ABLOY '8826-SIL' surface mounted closer, a disengaged ASSA ABLOY narrow stile lock referenced 'N15500008500008' connected to a set of ASSA ABLOY handles and a key cylinder and a disengaged ASSA ABLOY wide stile lock referenced 'N1050000817000K' connected to an Aperio electronic escutcheon set.

**Doorset B** was installed with a engaged ASSA ABLOY narrow stile lock referenced 'N15500008500008' connected to a set of ASSA ABLOY handles and a key cylinder and a disengaged ASSA ABLOY wide stile lock referenced 'N1050000817000K' connected to an Aperio electronic escutcheon set,

Both Doorsets were installed so that they opened towards the heating conditions for the duration of the test.

Doorset A achieved 34 minutes integrity performance, at which point the doorset was blanked off to allow the testing of Doorset B to continue. Doorset B failed at 56 minutes due to an integrity failure coincident with the narrow stile sashlock. The test was discontinued after a period of 66 minutes and at no point during the 66 minute duration did any failure occur in the wide stile sashlock area.

### WF Report No. 352047

The fire resistance performance of two specimens of single-acting, single-leaf uninsulated steel doorsets, both incorporating various items of building hardware in accordance with BS EN 1634-1:2014.

For the purposes of the test, the doorsets were referenced Doorset A and Doorset B. Only Doorset B is considered in this appraisal.

Briefly both Doorsets had overall nominal dimensions 2093 mm high by 1000 mm wide incorporating a door leaf with overall dimensions 2033 mm high by 884 mm wide by 43 mm thick. The door leaf was formed from 1.2 mm thick Galvanneal steel with a paper honeycomb core and hung on three UNION ASSA ABLOY stainless steel hinges within a 1.5 mm thick Galvanneal steel door frame.

**Doorset B** was installed with an engaged ASSA ABLOY narrow stile lock referenced 'N15500008500008' and a disengaged ASSA ABLOY wide stile lock referenced 'N1050000817000K'. Each lockset was fitted with a pair of lever handles and a euro profile double cylinder.

Both Doorsets were installed so that they opened away from the heating conditions for the duration of the test.

Doorset B satisfied the sustained flaming and gap gauge integrity criteria for the test duration of 241 minutes.

## Assessed Performance

### Timber Based Doorsets

It is proposed that previously fire tested (or assessed by Exova Warringtonfire) timber based doorsets may be fitted with ASSA ABLOY OneSystem locks without detracting from the performance of the doorset.

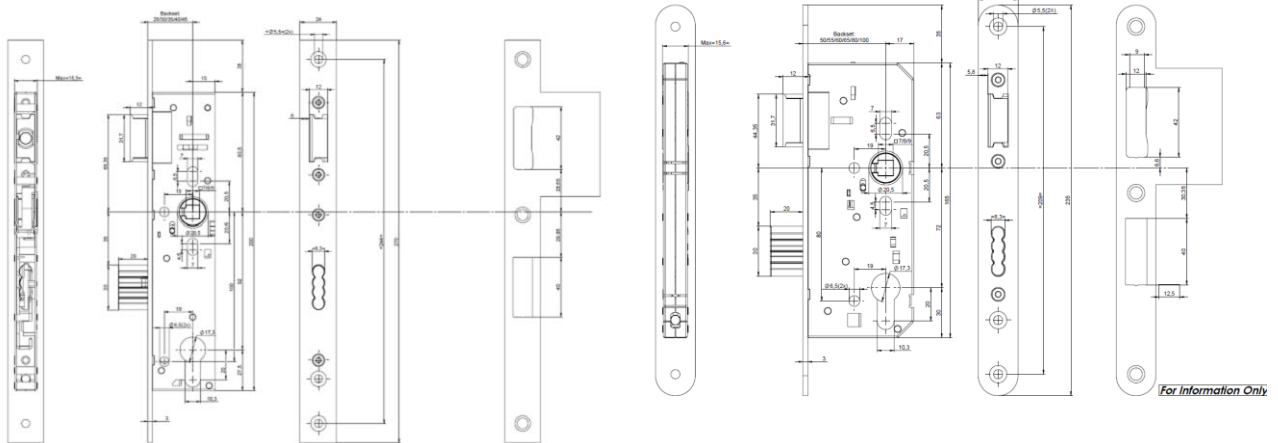
The performances of both Doorsets A and B during the test referenced WF No. 352406 is cited to display the ability of both the wide and narrow style, ASSA ABLOY OneSystem locks to contribute towards the required fire resistance performance for 30 minute rated timber based doorsets.

The performances of Doorset B during the test referenced WF No. 352406 is cited to display the ability of the Wide Style ASSA ABLOY OneSystem locks to contribute towards the required fire resistance performance for 60 minute rated timber based doorsets.

### Tested N1550 and N1050 Locksets

Doorset A included in test WF Report No. 352046 was a single acting, single leaf doorset with a 44 mm thick graduated density chipboard core and 8 mm thick hardwood lippings. The leaf was hung within a softwood frame. The doorset was fitted with a narrow stile ASSA ABLOY OneSystem lock, referenced 'N15500008500008' and a wide stile ASSA ABLOY OneSystem lock, referenced 'N1050000817000k' with 24 mm wide strike plates fitted to the frame. Both locks were disengaged for the test duration

Doorset B included in test WF Report No. 352046 was a single acting, single leaf doorset with a 54 mm thick graduated density chipboard core and 8 mm thick hardwood lippings. The leaf was hung within a hardwood frame. The doorset was fitted with a narrow stile ASSA ABLOY OneSystem lock, referenced 'N15500008500008' and a wide stile ASSA ABLOY OneSystem lock, referenced 'N1050000817000k' with 24 mm wide strike plates fitted to the frame. The narrow stile lock was latched for the duration of the test.



ASSA ABLOY OneSystem narrow stile lock case

ASSA ABLOY OneSystem wide stile lock case

On reviewing the observations taken from the tests report, it's clear that there were no integrity failures associated with either the narrow or wide stile sashlock locks fitted to Doorset A (FD30), for a test duration of 34 minutes; the door was blanked off after 34 minutes to allow the testing of the Doorset B (FD60) to continue.

An integrity failure was observed on Doorset B at 56 minutes, coincident with the narrow stile sashlock. Sustained flaming was observed across the top edge of the door at 61 minutes however this failure was not coincident with, or attributable to the wide stile sashlock. The test was discontinued after 66 minutes and at no point during the 66 minute duration did any failure occur in the wide stile sashlock area.

### FD30 Intumescent Protection

It is a requirement of this appraisal that the mortice cased locksets must be installed within the doorsets such that the same lever of intumescent protection is provided. This protection shall be such that the case is wrapped with a 1 mm thickness of Interdens intumescent to all faces and that a 1 mm thickness of the same material is provided behind the forend and strike plate.

### FD60 Intumescent Protection

It is a requirement of this appraisal that the mortice cased locksets must be installed within the doorsets such that the same lever of intumescent protection is provided. This protection shall be such that the case is wrapped with a 2 mm thickness of Interdens intumescent to all faces and that a 2 mm thickness of the same material is provided behind the forend and strike plate.

### Backsets compatible with FD60 doorsets

There were no problems observed with the wide stile lock for the test duration of 66 minutes and therefor the inclusion of the largest lockcase with a 100 mm backset is positively approved.

However, as previously discussed in this report an integrity failure was observed on Doorset B at 56 minutes, coincident with the narrow stile sashlock therefore the minimum backset dimensions needs to be considered.

Moving the cylinder and follower through holes further away from the onerous leaf edge position could be expected to negate the integrity failure observed at 56 minutes. Testing experience has shown that 55 mm backset locksets can be successfully incorporated into timber based doorsets for the required 60 minutes integrity period. It is therefore proposed that the minimum backset for timber based doors requiring 60 minutes integrity is limited to 55 mm. Only the wide stile lock cases have a backset range of 55 mm to 100 mm. Since the largest 100 mm backset lockset has been successfully tested, the smaller 55 mm backset lockset could also be expected to provide the required 60 minutes integrity performance. The reduction in size of the recess required in the leaf can only be beneficial to the integrity performance. Therefore for 60 minute timber based doorsets only the wide stile ASSA ABLOY OneSystem locks with a backset range of 55 to 100 mm are approved.

### **Alternative Locks**

The narrow stile ASSA ABLOY OneSystemlock, referenced 'N15500008500008' and the wide stile ASSA ABLOY OneSystemlock, referenced 'N1050000817000k' were chosen for the test on the basis that they were considered the most onerous of the proposed range. The wide stile lock with the 100 mm backset has the largest lock case dimensions and therefore requires the deepest doorset recess. The narrow stile lock with a 25 mm backset positioned the follower and cylinder through holes close to the edge of leaf, a location that was considered particularly onerous for timber doors. Both locks were fitted with a double cylinder which penetrated the whole thickness of the door.

In terms of the lock material, it is critical that materials which are combustible or have a lower melting point are not utilised since materials which melt or ignite may advance the burn through of the leaf and therefore lead to a premature integrity failure.

It is critical that the lock dimensions are not increased since the increased mortice required for a large case may lead to an earlier burn through of the leaf or increased strike/forend dimensions may lead to the penetration of flames/hot gases at the leaf edge due to further interruption of intumescent seals and an increase in conducted heat.

In terms of the intumescent protection, it is critical that this is not reduced from that tested, as the reaction of this material when subjected to the heating conditions of the test is essential in limiting the burn through of the leaf and at the leaf to frame gap at the lock position.

Substitution of alternative locksets from the proposed range may therefore be considered in terms of the critical aspects discussed and where such locksets fall within the scope of the tested locksets, it is considered reasonable to assume that no reduction in the performance of the doorset would be expected as a consequence of their substitution.

All of the proposed locks as detailed in Annex A are of identical materials and will utilise the same level of intumescent protection and all are of the same or smaller dimensions and therefore they may be positively appraised.



The proposed locksets are of the same basic construction as those tested comprising steel cases with steel latch bolts and/or deadbolts. All locksets have latch and/or dead bolt projections at least equal to that of the tested model. The nominal dimensions of all the locks considered by this report fall within the range of dimensions of the tested locks in terms of forend and case dimensions. The range listed within Annex A is therefore deemed acceptable.

Both lock installations included euro profile double cylinders and so the performance of the locksets when fitted with double cylinders, and equally cylinders with thumb turn are considered acceptable to this appraisal. Single cylinders provide less penetration through the face of the door leaf and so are positively appraised on the basis that they are a less onerous configuration for the lockset. All cylinders shall be of the same material specification as the tested cylinders.

All models incorporate an automatic latching function with the exception of the deadlock. As the lock may be required to provide an essential latching function to the door, the scope of use of the deadlock models shall be limited to use only with doorset which are either:

- a) Previously proven unlatched doorsets
- b) Doorsets which are permanently locked

Details of all of the locksets approved are given in Annex A at the end of this report.

### **Steel Based Doorsets**

It is further proposed that previously fire tested (or assessed by Exova Warringtonfire) steel based doorsets may be fitted with ASSA ABLOY OneSystem locks without detracting from the performance of the doorset.

The performances of Doorset B during the test referenced WF Report No. 352047 is cited to display the ability of the locks to contribute towards the required fire resistance performances.

Doorset B included in test WF Report No. 352046 was a single acting, single leaf uninsulated steel doorset. The leaf was hung within profiled steel frame. The doorset was fitted with a narrow stile 35 mm backset ASSA ABLOY OneSystem lock, referenced 'N15500008500008' and a wide stile 100 mm backset ASSA ABLOY OneSystemlock, referenced 'N1050000817000k, with 24 mm wide strike plates fitted to the frame. The narrow stile lock was latched for the duration of the test.

On reviewing the observations taken from the tests report, it's clear that there were no integrity failures associated with either the narrow or wide stile sashlock locks fitted to Doorset B, for a test duration of 241 minutes.

### **Backsets compatible with Steel doorsets**

The narrow stile lock fitted to doorset B had a 35 mm backset. This size was chosen as it was the minimum size backset the client supplied steel doorset was compatible with. It is however proposed that a backstop range of 25 mm to 100 mm be permitted.

For steel doors as the lockcase is also of steel, the potential integrity failure seen with a timber door due to either the removal of more material to accommodate larger locks or the location of through holes closer to the leaf edges, which can erode on timber doors, is not present. Therefore as long as the proposed steel doorset can accommodate the 25 mm backstop (in practice this a limitation determined by the size of the frame profile) and has valid certification or has previously achieved 240 minutes integrity (as appropriate), when tested by a UKAS approved laboratory (or assessed by Exova Warringtonfire) to EN 1634-1 or BS 476: Part 22: 1987. it is not anticipated that a minimum backstop of 25 mm would be any more onerous than the tested 35 mm backstop. The maximum 100 mm backstop has been successfully tested and therefore the full backset range of 25 mm to 100 mm is approved for use with steel doors.

### **Alternative locks**

The critical aspects of the locks in terms of their impact upon the performance of the doorset are considered to be the lock material and the case dimensions. The tested locks were chosen to be representative of the range of locks considered by this appraisal.

In terms of the lock material, it is critical that materials which are combustible or have a lower melting point are not utilised since materials which melt or ignite may lead to a premature integrity failure.

Substitution of alternative locks may therefore be considered in terms of the critical aspects discussed and where such locks fall within the scope of the tested locks, it is considered reasonable to assume that no reduction in the performance of the doorset would be expected as a consequence of their substitution.

The proposed locksets are of the same basic construction as those tested comprising steel cases with steel latch bolts and/or deadbolts. All locksets have latch and/or dead bolt projections at least equal to that of the tested model. The nominal dimensions of all the locks considered by this report fall within the range of dimensions of the tested locks in terms of forend and case dimensions. The range listed within Annex A is therefore deemed acceptable.

Both lock installations included euro profile double cylinders and so the performance of the locksets when fitted with double cylinders, and equally cylinders with thumb turn are considered acceptable to this appraisal. Single cylinders provide less penetration through the face of the door leaf and so are positively appraised on the basis that they are a less onerous configuration for the lockset. All cylinders shall be of the same material specification as the tested cylinders.

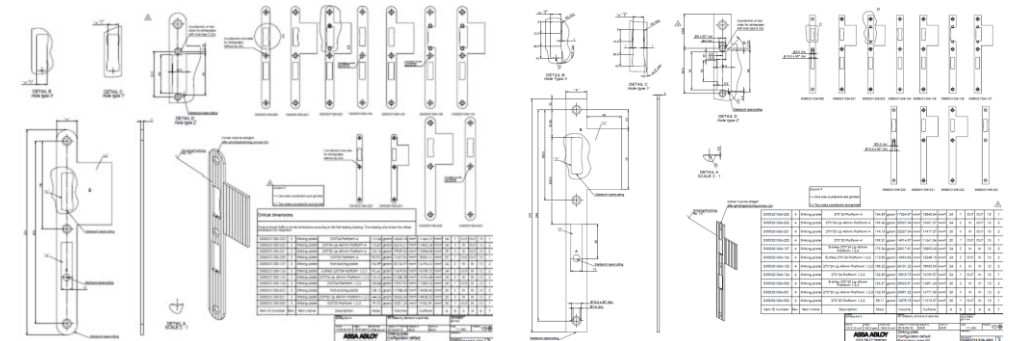
All models incorporate an automatic latching function with the exception of the deadlock. As the lock may be required to provide an essential latching function to the door, the scope of use of the deadlock models shall be limited to use only with doorset which are either:

- a) Previously proven unlatched doorsets
- b) Doorsets which are permanently locked

Details of all of the locksets approved are given in Annex A at the end of this report.

### Forend /Strike plates widths

The tested forend and strike plates were 24 mm wide. The timber doorsets were tested with square end strike plates with a lip and the steel doors were tested with round end strike plates with a lip.



It is proposed that locksets can also be supplied with 20 mm wide forends and strike plates, with or without a lip.

As the alternative 20 mm wide forend and strike plates require the removal of less material to both the frame and leaf edge, when fitted to timber doorsets, the inclusion of the narrower forends and strike plates can only be considered to be beneficial. Therefore the alternative 20 mm wide forend and strike plate variants are approved subject to intumescent specification discussed earlier in this report.

It's not anticipated that the alternative forend and strike plates will be either beneficial or detrimental to the required integrity performance in steel doorsets. Therefore the alternative 20 mm wide forend and strike plate variants are approved.

### Dimension of Follower

The ASSA ABLOY OneSystem locks included in test WF Reports 352046 and 352047 incorporated an 8 mm follower. It is proposed that followers of 8 – 9 mm be permitted.

Providing the material of the follower isn't change from that tested, this proposal is not deemed to be problematic for fire resistance and therefore is deemed acceptable.

## Required Doorset specifications

As stated in this report, the doorset, in the required configuration, will be previously tested (or assessed by Exova Warringtonfire) and its performance is therefore not in doubt.

To enable the use of the ASSA ABLOY OneSystem locks on a range of doorsets, it is necessary to address the available information on the proposed doorset. As this appraisal is intended to be used on a general basis and not restricted to any particular manufacturer of fire resisting doorsets, the following points are given to enable the locks to be used safely:

### Proposed 30 and 60 Minute Timber Based Doorset

- a) The doorset shall carry valid certification or the doorset, including the door frame and associated ironmongery should have achieved 30 or 60 minutes integrity and where applicable insulation, when tested by a UKAS approved laboratory (or assessed by Exova Warringtonfire) to EN 1634-1 or BS 476: Part 22: 1987.
- b) If the proposed doorset is to be used in double-leaf configuration the test or assessment evidence should be applicable to double-leaf configuration.
- c) The leaves of the proposed doorset shall be of a minimum thickness of 44 mm for 30 minute doorsets and 54 mm for 60 minute doorsets.
- d) The leaves should incorporate hardwood lippings of a minimum thickness of 6 mm and minimum density 650kg/m<sup>3</sup>.
- e) Door frame density - 450 kg/m<sup>3</sup> for 30 minute doorsets and 650 kg/m<sup>3</sup> for 60 minute doorsets.

Additionally, the amount of interruption to the intumescent seal specification at the door leaf to frame perimeter clearance gaps should be replicated or reduced from that originally specified for the tested doorset.

### Proposed Steel Based Doorset

- a) The doorset shall carry valid certification or the doorset, including the door frame and associated hardware should have achieved up to 240 minutes integrity and where applicable insulation, when tested by a UKAS approved laboratory (or assessed by Exova Warringtonfire) to EN 1634-1 or BS 476: Part 22: 1987.
- b) If the proposed doorset is to be used in double-leaf configuration the test or assessment evidence should be applicable to double-leaf configurations.

## Conclusions

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Should the recommendations given in this report be followed, it can be concluded that the ASSA ABLOY OneSystem locks detailed within this report may be fitted to previously tested or assessed (by Exova Warringtonfire) timber based doorsets to provide 30 or 60 minutes integrity performance, or steel based doorsets to provide up to 240 minutes integrity performance, without detracting from the overall performance of the doorset, with respect to EN 1634-1 or BS 476: Part 22: 1987.

## Validity

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This assessment is issued on the basis of test data and information available at the time of issue. If contradictory evidence becomes available to Exova Warringtonfire the assessment will be unconditionally withdrawn and ASSA ABLOY Sicherheitstechnik GmbH will be notified in writing. Similarly the assessment is invalidated if the assessed construction is subsequently tested because actual test data is deemed to take precedence over an expressed opinion. The assessment is valid initially for a period of five years i.e. until 1<sup>st</sup> November 2020, after which time it is recommended that it be returned for re-appraisal.

The appraisal is only valid provided that no other modifications are made to the tested construction other than those described in this report.

## Summary of Primary Supporting Data

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### **WF Report No. 352046**

The fire resistance performance two single-acting, single-leaf timber doorsets, both incorporating various items of building hardware in accordance with BS EN 1634-1:2014

For the purposes of the test, the doorsets were referenced Doorset A and Doorset B.

Briefly both Doorsets had overall nominal dimensions 2090 mm high by 1012 mm wide incorporating a door leaf with overall dimensions 2040 mm high by 933 mm wide. Doorset A was 44 mm thick and Doorset B was 54 mm thick. The door leaves were of a solid graduated density chipboard construction, with 8 mm hardwood lippings to the vertical edges. The 30 minute door was hung within a softwood frame and the 60 minute door was hung within a hardwood frame. Both doorsets were hung on three UNION ASSA ABLOY stainless steel hinges

**Doorset A** was installed with a UNION ASSA ABLOY '8826-SIL' surface mounted closer, a disengaged ASSA ABLOY narrow stile lock referenced 'N15500008500008' connected to a set of ASSA ABLOY handles and a key cylinder and a disengaged ASSA ABLOY wide stile lock referenced 'N1050000817000K' connected to an Aperio electronic escutcheon set.

**Doorset B** was installed with a engaged ASSA ABLOY narrow stile lock referenced 'N15500008500008' connected to a set of ASSA ABLOY handles and a key cylinder and a disengaged ASSA ABLOY wide stile lock referenced 'N1050000817000K' connected to an Aperio electronic escutcheon set,

Both Doorsets were installed so that they opened towards the heating conditions for the duration of the test.

The specimens satisfied the test requirements for the following periods:

<b>Test Results:</b>		<b>Doorset A</b>	<b>Doorset B</b>
<b>Integrity performance</b>	Sustained flaming	34 minutes <sup>#</sup>	56 minutes <sup>^</sup>
	Gap gauge	34 minutes <sup>#</sup>	66 minutes <sup>#</sup>
	Cotton Pad	34 minutes <sup>#</sup>	56 minutes <sup>^</sup>
<b>Insulation performance</b>		34 minutes <sup>#</sup>	56 minutes <sup>^</sup>

\* The test duration.

<sup>#</sup> Specimen blanked off.

<sup>^</sup> Failure was specific to narrow stile lock

The test was discontinued after a period of 66 minutes.

**Date of Test** 8<sup>th</sup> June 2015

**Test sponsor ASSA ABLOY Ltd. (Permission Granted)**

**WF Report No. 352047** The fire resistance performance two single-acting, single-leaf uninsulated steel doorsets, both incorporating various items of building hardware, tested in accordance with BS EN 1634-1:2014

For the purposes of the test, the doorsets were referenced Doorset A and Doorset B, only Doorset B is considered for this appraisal.

For the purpose of the test the doorsets were referenced Doorset A and Doorset B.

Briefly both Doorsets had overall nominal dimensions 2093 mm high by 1000 mm wide incorporating a door leaf with overall dimensions 2033 mm high by 884 mm wide by 43 mm thick. The door leaf was formed from 1.2 mm thick Galvanneal steel with a paper honeycomb core and hung on three UNION ASSA ABLOY stainless steel hinges within a 1.5 mm thick Galvanneal steel door frame.

**Doorset A** was installed with an UNION ASSA ABLOY concealed overhead door closer referenced 'X89624-SIL EN2~4'.

**Doorset B** was installed with an engaged ASSA ABLOY narrow stile lock referenced 'N15500008500008' and a disengaged ASSA ABLOY wide stile lock referenced 'N1050000817000K'. Each lockset was fitted with a pair of lever handles and a euro profile double cylinder.

Both Doorsets were installed so that they opened away from the heating conditions for the duration of the test.

**The specimens satisfied the test requirements for the following periods:**

Test Results:		Doorset A		Doorset B	
Integrity performance	Sustained flaming	241 minutes		241 minutes	
	Gap gauge	241 minutes		241 minutes	
	Cotton Pad	70 minutes		70 minutes	
Insulation performance		5 minutes		5 minutes	
Radiation Performance	5 kW/m <sup>2</sup>	10 kW/m <sup>2</sup>	15 kW/m <sup>2</sup>	20 kW/m <sup>2</sup>	25 kW/m <sup>2</sup>
	Doorset A	23 minutes	54 minutes	94 minutes	150 minutes
	Doorset B	36 minutes	80 minutes	155 minutes	241 minutes

\*The test was discontinued after duration of 241 minutes

**Date of Test** 9<sup>th</sup> June 2015

Test sponsor ASSA ABLOY Ltd. (Permission Granted)

## Declaration by ASSA ABLOY Sicherheitstechnik GmbH

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We the undersigned confirm that we have read and complied with the obligations placed on us by the UK Fire Test Study Group Resolution No. 82: 2001.

We confirm that the component or element of structure, which is the subject of this assessment, has not to our knowledge been subjected to a fire test to the Standard against which the assessment is being made.

We agree to withdraw this assessment from circulation should the component or element of structure be the subject of a fire test to the Standard against which this assessment is being made.

We are not aware of any information that could adversely affect the conclusions of this assessment.

If we subsequently become aware of any such information we agree to cease using the assessment and ask Exova Warringtonfire to withdraw the assessment.

Signed:

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For and on behalf of:

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## Signatories

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Responsible Officer

S. Gilfedder\* - Certification Engineer



Approved

A. Kearns\* - Technical Manager

\* For and on behalf of Exova Warringtonfire.

Report Issued: 22<sup>nd</sup> October 2015

The assessment report is not valid unless it incorporates the declaration duly signed by the applicant.

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## Annex A – Approved Options

<b>Sash Lock</b>	<b>Narrow Stile</b>	<b>Wide Stile</b>
Backset (mm)	25,30,35,40,45.	55,60,65,70,80,100.
Type	N1550	N1050
<b>Latch Lock</b>	<b>Narrow Stile</b>	<b>Wide Stile</b>
Backset (mm)	25,30,35,40,45.	55,60,65,70,80,100.
Type	N1552	N1052
<b>Dead Lock</b>	<b>Narrow Stile</b>	<b>Wide Stile</b>
Backset (mm)	25,30,35,40,45.	55,60,65,70,80,100.
Type	N1553	N1053
<b>*Panic Lock</b>	<b>Narrow Stile</b>	<b>Wide Stile</b>
Backset (mm)	30,35,40,45.	55,60,65,70,80,100.
Type	N16XX	N11XX
<b>*Panic Lock self Locking</b>	<b>Narrow Stile</b>	<b>Wide Stile</b>
Backset (mm)	30,35,40,45.	55,60,65,70,80,100.
Type	N17XX	N12XX

*\*Where the panic locks are used as a part of an EN179 or EN1125 solution, the system will have been previously proven in the proposed configuration.*