



CERTIFICATE OF APPROVAL

No CF6157

This is to certify that, in accordance with
TS00 General Requirements for Certification of Fire Protection Products
The undermentioned products of

HOPPE (UK) LTD
Gailey Park, Gravelly Way
Standeford,
Wolverhampton
WV10 7GW
TEL: 01902 484400

Have been assessed against the requirements of the Technical Schedule(s)
denoted below and are approved for use subject to the conditions
appended hereto:

CERTIFIED PRODUCT
**ARRONE AR810 Series Mortice
Locks and Latches**

TECHNICAL SCHEDULE
**TS23 The Contribution of
Locks and Latches to the
Performance of Fire Resisting
of Doorsets**

Signed and sealed for and on behalf of Warringtonfire Testing and Certification Limited

Paul Duggan
Certification Manager



Issued: 21st May 2024
Audit Test Frequency: Annually
Valid to: 20th May 2029



CERTIFICATE No CF6157

HOPPE UK Ltd

1. This certification is provided to the client for its own purposes, and we cannot opine on whether it will be accepted by Building Control authorities or any other third parties for any purpose.
2. This approval applies only to the Mortice Locks and Latches:

Lock/Latch Reference	Description	Backset	Centres
AR810-S/R-50 AR810-S/R-55 AR810-S/R-60	Mortice sashlock - 20mm or 24mm square or radius forend	50 mm 55 mm 60 mm	72 mm
AR811-S/R-50 AR811-S/R-55 AR811-S/R-60	Mortice upright latch - 20mm or 24mm square or radius forend	50 mm 55 mm 60 mm	72 mm
AR812-S/R-50 AR812-S/R-55 AR812-S/R-60	Mortice Deadlock - 20mm or 24mm square or radius forend	50 mm 55 mm 60 mm	N/A
AR813-S/R-50 AR813-S/R-55 AR813-S/R-60	Mortice Bathroom Lock - 20mm or 24mm square or radius forend	50 mm 55 mm 60 mm	78 mm
AR814-S/R-50 AR814-S/R-55 AR814-S/R-60	Mortice Night Latch - 20mm or 24mm square or radius forend	50 mm 55 mm 60 mm	72 mm

The range is supplied with a maximum 240 x 24 mm forend, and 15 mm thick lockcase. The lockcase is steel, and the forends, latch bolts, dead bolts and strike plates are all of stainless steel with a minimum 11 mm latchbolt throw. The approval includes the above lock models in square or radius forend/strike.

3. This approval relates to their use with the following door assemblies: -

Code ITT - 20 minute to 120 minute door assemblies door assemblies incorporating intumescent perimeter seals and consisting of timber faced and edged leaves with timber or cellulosic cores, hung in timber or cellulosic frames*.

Code MM/IMM - 20 minute to 240 minute door assemblies consisting of uninsulated or insulated predominantly steel leaves, hung in steel frames with or without intumescent seals (Code IMM/MM).**

* Excludes the use of AR900/ADJ-STRIKE, AR911/914-ADJ-STRIKE and ADJ-TIDY plastic dust boxes on ITT90 and 120 door assemblies.

** Excludes the use of AR900/ADJ-STRIKE, AR911/914-ADJ-STRIKE and ADJ-TIDY plastic dust boxes.

4. The locks and latches are approved on the basis of:

Signed Page 2 of 10
CGM24667-16



Issued: 21st May 2024
Valid to: 20th May 2029



CERTIFICATE No CF6157

HOPPE UK Ltd

- i) Initial type testing to EN 1634-1 and EN 12209: 2003
 - ii) An appraisal against TS23
 - iii) Certification of quality management system.
 - iv) Inspection and surveillance of factory production control
 - v) Ongoing audit testing in accordance with TS23 requirements
5. This approval relates to the use of the above locks/latches in contributing to the fire resistance performance of timber based doorsets and steel based doorsets, as defined in BS EN 1634-1:2014+A1:2018 or BS 476-22: 1987.
6. The mortice locks and/or latches shall only be used with door assemblies that are CERTIFIRE approved or have achieved the appropriate fire resistance performance when tested at a laboratory accredited to IS/IEC 17025 (under International Laboratory accreditation Cooperation (ILAC) membership), in accordance with BS 476: Part 22: 1987 and/or BS EN 1634:1 with similar or larger size locks and strikeplates, the critical aspects of the doorset construction are considered to be the material of the door frame, the leaf to frame clearance gaps and the lipping material. Attention should be paid to these details, and these should not be amended from that previously fire tested.
7. The following minimum specification shall be followed, unless the chosen doorset has evidence to the contrary with locks/strikeplates of a similar size/specification:
- Timber-based assemblies:
- i) Door frame minimum density - 450 kg/m³ (30 minutes), 640 kg/m³ (60 minutes)
 - ii) Door leaves shall have a minimum thickness of 44 mm for 30 minute applications and 54 mm for 60 minute applications.
 - iii) Lipping minimum density - 640 kg/m³.
- Steel-based assemblies (Code MM/IMM)
- i) Door leaves shall have a minimum thickness of 44 mm for up to 240 minute applications.
 - ii) No additional intumescent protection is required.
 - iii) AR900/ADJ-STRIKE, AR911/914-ADJ-STRIKE and ADJ-TIDY plastic dust boxes are not permitted on MM/IMM doorsets.

Signed Page 3 of 10
CGM24667-16

Issued: 21st May 2024
Valid to: 20th May 2029

CERTIFICATE No CF6157

HOPPE UK Ltd

8. When fitted to insulated ITT timber door assemblies, The required protection will be as follows:

- The required protection for 30 minute ITT applications will be:
 - i. Standard strikeplates/keeps
 - 2 mm thick Interdens mono ammonium phosphate intumescent sheet behind the forend and strike/keep plates and 1 mm thick Interdens mono ammonium phosphate intumescent sheet around the lock case for all doorset assemblies.
 - Or
 - 1 mm thickness of graphite-based intumescent sheet material around the lock case and behind the forend and strike plate. ***The graphite-based intumescent shall be provided by Hoppe UK Ltd.***
 - ii. AR900/ADJ-STRIKE & AR911/914-ADJ-STRIKE
 - 2 mm thick Interdens mono ammonium phosphate intumescent sheet behind the forend and strike/keep plates and 1 mm thick Interdens mono ammonium phosphate intumescent sheet around the lock case for all doorset assemblies.
- The required protection for 60 minute ITT applications will be (all strikeplates/keeps):
 - The required protection will be 2 mm thick Interdens mono ammonium phosphate intumescent sheet behind the forend and strike/keep plates and 1 mm thick Interdens mono ammonium phosphate intumescent sheet around the lock case for all doorset assemblies.
 - Additionally for 60 minute ITT applications only, the perimeter intumescent within the frame/door edge shall by-pass the strike plate or forend by a minimum of 8.5 mm wide on each side (with the exception of the latchbolt lead where present).

Failure to install the protection will invalidate this certificate.

9. Timber/mineral-based assemblies (Code ITT 90 and ITT120)

Hoppe locks and latches shall only be fitted in 90 and 120 minute ITT doorsets which have previously been tested with locks/latches of a similar size and specification, subject to the following requirements:

- i. The required intumescent protection shall be as tested by the chosen door manufacturer. In all cases this shall be a minimum of a 2 mm thick intumescent sheet material incorporated around the lock case (type/manufacturer as tested by the doorset supplier), and a bedding of the same type and thickness of intumescent material behind the forend and strike plate/keep, however, this protection shall be increased as required based on the chosen doorset manufacturers test data.

Signed Page 4 of 10
CGM24667-16



Issued: 21st May 2024
Valid to: 20th May 2029

CERTIFICATE No CF6157

HOPPE UK Ltd

- ii. Where chosen doorsets are approved in latched configurations only, the chosen doorset shall have been tested with a maximum latch bolt throw of 12 mm.
- iii. Where cylinders are required the chosen doorset shall have been successfully tested with single or double cylinders as required.
- iv. The chosen doorset shall have been successfully tested with a lock/latch of the following minimum size:

Component/dimension	Size (mm)
<i>Basic lockcase:</i>	
• Forend width	24
• Forend Height	240
• Forend thickness	3
• Case height	170
• Case width	69 -109 (to suit required backset)
• Case thickness	15
<i>Sashlock/bathroom strike plate:</i>	
• Strike plate width	24 (exc. Lip)
• Strike plate height	204
• Strike plate thickness	1.5
• Strike plate lip height	66
<i>Latch strike plate:</i>	
• Strike plate width	24 (exc. Lip)
• Strike plate height	88
• Strike plate thickness	1.5
• Strike plate lip height	58
<i>Deadlock keep:</i>	
• Strike plate width	24
• Strike plate height	88
• Strike plate thickness	1.5

- v. AR900/ADJ-STRIKE, AR911/914-ADJ-STRIKE and ADJ-TIDY plastic dust boxes are not permitted on ITT 90/120 doorsets.

Note: Where Hoppe lock does not comply with the parameters identified above it shall not be used in conjunction with the chosen 90 minute and 120 minute timber-based assemblies (ITT).

- 10. The mortice locks and/or latches and their associated strikeplates and keeps may only be fitted in the manner described in this certificate and subject to any limitations on the inclusion of locks/latches specified for the door leaf. This approval is applicable only to the specified locks used with door assemblies of proven fire resistance (as defined in BS EN 1634-1 or BS 476: Part 22: 1987) and when using appropriate intumescent protection.

Signed Page 5 of 10
CGM24667-16



Issued: 21st May 2024
Valid to: 20th May 2029



CERTIFICATE No CF6157

HOPPE UK Ltd

11. Cylinders shall only be fitted to doors which have previously been shown capable of accommodating the installation of cylinder locks without detriment to the doorset's performance.
12. The mortice locks may incorporate Euro profile cylinders as follows:
- i) Single cylinder
 - ii) Double cylinder
 - iii) Cylinder and thumbturn
 - iv) Brass or steel cylinders for ITT30 and 60 doorsets
 - v) Steel cylinders only for ITT90/120 and MM/IMM 240 doorsets

Note: The hole in the door face shall follow the shape of the cylinders and be as tight as possible; furthermore the single cylinders door preparation will penetrate through only half the thickness of the door leaf)

13. Lock assemblies not incorporating a latching mechanism (e.g. deadlocks), shall only be fitted to proven unlatched door assemblies.
14. Recessing for locks and strikeplates shall result in a tight fit, allowing for any intumescent protection where required.
15. The spindle hole through the door shall be a maximum of 16 mm diameter unless the doorset has test evidence that proves spindle holes of a greater size than this.
16. The lock keeps/strikeplates to ITT 30 and 60 doorsets only may incorporate plastic back-boxes providing the intumescent protection identified above is maintained.
17. The locks/latches should not be fitted higher than 1100 mm from the finished floor level of the surrounding floors.
18. The ITT doorsets shall be installed in accordance with BS 8214
19. All door hardware is subject to the acceptance by the chosen door assembly supplier's tested, assessed or certificated scope, which generally identifies the types of hardware approved, the required specification/design based on the key materials/ maximum size (e.g. forend, case, strikeplate, etc.), and the application of any additional intumescent protection.

On this basis approval should be sought from the specific door assembly supplier to ensure compliance based on this assessed/certificated scope.

20. The approval relates to on-going production. Product and/or its immediate packaging are identified with the manufacturer's name, the product name or number, the CERTIFIRE name or name and mark, together with the CERTIFIRE certificate number and application where appropriate.

Signed Page 6 of 10
CGM24667-16

Issued: 21st May 2024
Valid to: 20th May 2029

CERTIFICATE No CF6157 HOPPE UK Ltd

21. The following table shows acceptable doorset types and fire resistance periods for the AR810 Series lock and latches with standard strikeplates:

Class	Approved Door Type			
	IMM	MM	ITT	ITM
FD20	✓	✓	✓	✗
FD30	✓	✓	✓	✗
FD60	✓	✓	✓	✗
FD90	✓	✓	✓	✗
FD120	✓	✓	✓	✗
FD240	✓	✓	✗	✗
E 20	✓	✓	✓	✗
EI 20	✓	✓	✓	✗
E 30	✓	✓	✓	✗
EI 30	✓	✓	✓	✗
E 60	✓	✓	✓	✗
EI 60	✓	✓	✓	✗
E 90	✓	✓	✓	✗
EI 90	✓	✓	✓	✗
E 120	✓	✓	✓	✗
EI 120	✓	✓	✓	✗
E 240	✓	✓	✗	✗
EI 240	✓	✓	✗	✗

Key:

- ✓ - Approved
- ✗ - Not approved

Signed Page 7 of 10
CGM24667-16



Issued: 21st May 2024
Valid to: 20th May 2029

CERTIFICATE No CF6157 HOPPE UK Ltd

22. The following table shows acceptable doorset types and fire resistance periods for the AR810 Series lock and latches with AR900/ADJ-STRIKE, AR911/914-ADJ-STRIKE and ADJ-TIDY plastic dust boxes:

Class	Approved Door Type			
	IMM	MM	ITT	ITM
FD20	x	x	✓	x
FD30	x	x	✓	x
FD60	x	x	✓	x
FD90	x	x	x	x
FD120	x	x	x	x
FD240	x	x	x	x
E 20	x	x	✓	x
EI 20	x	x	✓	x
E 30	x	x	✓	x
EI 30	x	x	✓	x
E 60	x	x	✓	x
EI 60	x	x	✓	x
E 90	x	x	x	x
EI 90	x	x	x	x
E 120	x	x	x	x
EI 120	x	x	x	x
E 240	x	x	x	x
EI 240	x	x	x	x

Key:

- ✓ - Approved
x - Not approved

Signed Page 8 of 10
CGM24667-16



Issued: 21st May 2024
Valid to: 20th May 2029

CERTIFICATE No CF6157 HOPPE UK Ltd

23. Doors are categorised as the following types:

Code ITT - 20 minute to 120 minute door assemblies door assemblies incorporating intumescent perimeter seals and consisting of timber faced and edged leaves with timber or cellulosic cores, hung in timber or cellulosic frames.

Code ITM - 20 minute to 120 minute door assemblies door assemblies incorporating intumescent perimeter seals and consisting of timber faced and edged leaves with timber or cellulosic cores, hung in steel frames.

Code MM - 20 to 240 minute doorsets consisting of uninsulated or insulated predominantly steel leaves, hung in steel frames without intumescent seals.

Code IMM - 20 to 240 minute doorsets consisting of uninsulated or insulated predominantly steel leaves, hung in steel frames with intumescent seals.

Limitations of Approval

- The locks may not be fitted to timber doorsets without perimeter intumescent fire seals to the frame rebate or door edge.
- ITT door leaves shall have solid lignocellulosic construction in the lock area encompassing the entire lock case.
- Strikeplates/keeps
The range of locks/latches are approved with a range of strikeplates/keeps. All are steel and a maximum size permitted for use on all doorsets is as follows:
 - Standard strikeplates/keeps:

ITT30/60 Doorsets	
Width	22 mm (exc. Lip)
Height	204 mm
Thickness	1.5 mm
Latchbolt- Lip Height	50 mm
ITT90/120 & MM/IMM 240 Doorsets	
Width	24 mm (exc. Lip)
Height	204 mm
Thickness	1.5 mm
Latchbolt- Lip Height	66 mm

The lock keeps/strikeplates in ITT 30 and 60 doorset only may incorporate plastic back-boxes providing the intumescent protection identified in Section 8 is maintained.

Signed Page 9 of 10
CGM24667-16



Issued: 21st May 2024
Valid to: 20th May 2029

CERTIFICATE No CF6157 HOPPE UK Ltd

- Alternative AR900/ADJ-STRIKE (ITT 30 and 60 minute doorsets only):

ITT30/60 Doorsets	
width	24 mm (exc. Lip)
height	170 mm
thickness	1.5 mm
Latchbolt- lip height	127 mm

- AR911/914-ADJ-STRIKE (ITT 30 and 60 minute doorsets only):

ITT30/60 Doorsets	
width	24 mm (exc. Lip)
height	145 mm
thickness	1.5 mm
Latchbolt- lip height	97 mm

The AR900/ADJ-STRIKE and AR911/914-ADJ-STRIKE may incorporate ADJ-TIDY plastic dust boxes to the rear, providing the intumescent protection as detailed in Section 8 is maintained.

Approved lock/latch models and classifications:

Lock/Latch Reference	Description	Classification to EN 12209: 2003										
		3	X	8	1	0	G	3	B	C	2	0
AR810	Mortice Sashlock	3	X	8	1	0	G	3	B	C	2	0
AR811	Mortice Upright Latch	3	X	8	1	0	G	0	B	0	2	0
AR812	Mortice Deadlock	3	X	8	1	0	G	3	B	C	0	0
AR813	Mortice Bathroom Lock	3	X	8	1	0	G	0	B	G	2	0
AR814	Mortice Night Latch	3	X	8	1	0	G	1	B	B	2	0

The approval includes the above lock models in square or radius forend/strike.

Further Information

Further information regarding the details contained in this certificate may be obtained from Hoppe (UK) Ltd (Tel: 01902 484407).

Further information regarding CERTIFIRE certification and other approved products can be obtained from CERTIFIRE (Tel: 01925 646777)

Signed Page 10 of 10
CGM24667-16



Issued: 21st May 2024
Valid to: 20th May 2029