

# CERTIFICATE OF APPROVAL No CF 530

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

# **HOPPE (UK) LIMITED**

Gailey Park Industrial Estate, Gravelly Way, Standeford, Wolverhampton, WV10 7GW
Tel: 01902 484407 Fax: 01902 484457

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 Range of
72 mm and 85 mm Locks

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

TS 31 The Contribution Of Emergency Exit Devices, Operated By A Lever Handle Or Push Pad, To The Performance Of Fire Resisting Door Assemblies

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

Paul Duggan

**Certification Manager** 



Issued: Revised: Valid to: 9<sup>th</sup> March 2007 10<sup>th</sup> February 2021 31<sup>st</sup> August 2022





### ARRONE Range of 72 mm and 85 mm Locks

- 1. The locks and latches covered by this certificate are all steel cased. This approval relates to the following specific locks:
  - AR910 Sashlock
  - AR911 Upright Latch
  - AR912 Deadlock
  - AR913 Bathroom Lock
  - AR914 Nightlatch
  - AR915-ESC Escape Lock
  - AR915-APP Apartment Lock
  - AR916 Rollerbolt Lock
  - AR755 Roller Latch
  - AR910-S-55/85 Sashlock
  - AR910-R-55/85 Sashlock
  - AR912-S-55/85 Deadlock
  - AR912-R-55/85 Deadlock

Models are approved in 50, 55, 60, 65 and 80 mm backsets, and 72 mm and 85 mm centres. Approved finishes are SSS, PSS and PB. All models are approved in 20 mm and 24 mm width square or radius forend. Forend and strike plate material grades 430, 304 and 316 are approved.

- This certification is provided to the client for their own purposes and we cannot opine on whether it will be accepted by Building Control authorities or any other third parties for any purpose.
- 3. This approval relates to the use of the above locks/latches in contributing to the fire resistance performance of timber based doorsets and metallic based doorsets, as defined in BS EN 1634-1 or BS 476: Part 22: 1987.
- 4. This approval relates to their use with the following door assemblies:-

Latched and unlatched, intumescent sealed door assemblies consisting of timber faced and edged leaves with timber, cellulosic or mineral cores in timber frames having a fire resistance up to 120 minutes (Code ITT).

Latched and unlatched, door assemblies consisting of uninsulated or insulated predominantly steel leaves, hung in steel frames with or without intumescent seals having a fire resistance up to 240 minutes (Code IMM/MM).

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### ARRONE Range of 72 mm and 85 mm Locks

- 5. The locks are approved on the basis of:
  - i) Initial type testing to EN 1634-1 and EN 12209/EN 179 (where relevant)
  - ii) An appraisal against TS23 or TS31 (where relevant)
  - iii) Certification of quality management system.
  - iv) Inspection and surveillance of factory production control
  - v) On-going audit testing in accordance with TS23 or TS31 requirements
- 6. The mortice locks and/or latches should only be used with door assemblies of proven fire resistance (as defined in BS EN 1634-1 or BS 476: Part 22: 1987), 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. The following minimum specification shall be followed:

#### Timber/mineral-based assemblies (Code ITT30 and ITT60):

- i) Door frame 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 density 640 kg/m<sup>3</sup>.

#### Timber/mineral-based assemblies (Code ITT90 and ITT120):

- i) Previously been proven unlatched, as either single-leaf or double-leaf door assemblies as required
- ii) <u>Hardwood door frame</u> Hardwood having minimum dimensions of 38 mm thick by 90 mm deep with a planted hardwood doorstop of minimum dimensions 20 mm wide by 12 mm thick and a minimum density of 650 kg/m<sup>3</sup> or
- iii) Mineral cored construction door frame Having minimum dimensions of 43 mm thick by 94 mm deep with the addition of minimum 4 mm thick hardwood facings to all sides and incorporating a planted hardwood doorstop of minimum dimensions 20 mm wide by 12 mm thick and a minimum density of 650 kg/m<sup>3</sup>.
- iv) Door leaves shall have a minimum thickness of 57 mm.
- v) Lipping density 640 kg/m<sup>3</sup>.
- vi) Leaf to frame gaps 3mm or less

### 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.

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### ARRONE Range of 72 mm and 85 mm Locks

- iii) AR900/ADJ-STRIKE, AR911/914-ADJ-STRIKE and ADJ-TIDY plastic dust boxes are not permitted on MM/IMM doorsets.
- 7. When fitted to insulated ITT timber or mineral composite-based door assemblies, the required intumescent protection will be as follows:
  - i) All locks and strikeplates/keeps The required protection for 30 minute ITT applications will be 1 mm thickness of Interdens mono ammonium phosphate sheet material, around the lock case and behind the forend and strike plate.
  - ii) The required protection for 60 minute ITT applications will be:
    - 1.4 mm thick lipped and 3 mm thick unlipped strikeplates/keeps 1 mm thickness of Interdens mono ammonium phosphate sheet material around the lock case and behind the forend and strike plate. Additionally the perimeter intumescent fire seal within the frame/door edge shall by-pass the strike plate or forend by a minimum of 8 mm wide on each side (with the exception of the latchbolt lip where present).
    - <u>AR900/ADJ-STRIKE & AR911/914-ADJ-STRIKE</u> 1 mm thickness of Interdens mono ammonium phosphate sheet material around the lock case and behind the forend, and 2 mm thickness of Interdens mono ammonium phosphate sheet material behind the strike plate. Additionally the perimeter intumescent fire seal within the frame/door edge shall by-pass the strike plate or forend by a minimum of 8 mm wide on each side (with the exception of the latchbolt lip where present).
  - The required protection for 90 minute and 120 ITT applications with 1.4 mm thick lipped and 3 mm thick unlipped strikeplates/keeps only will be 2 mm thickness of Interdens mono ammonium phosphate sheet material around the lock case and behind the forend and strike plate. Additionally the perimeter intumescent fire seal within the frame/door edge shall by-pass the strike plate or forend by a minimum of 9.5 mm wide on the opening side (with the exception of the latchbolt lip where present), and a minimum of 17.5 mm on the closing side.
    - AR900/ADJ-STRIKE, AR911/914-ADJ-STRIKE and ADJ-TIDY plastic dust boxes are not permitted on ITT 90 and 120 minute doorsets.

Note: Failure to install the intumescent protection will invalidate this certificate

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### ARRONE Range of 72 mm and 85 mm Locks

- 8. The mortice locks and/or latches should only be used with doorsets which have 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 with similar size locks and strikeplates. in the proposed configuration i.e. single-leaf or double-leaf.
- 9. Lock assemblies not incorporating a latching mechanism and the AR916 and AR755 Rollerbolt lock shall only be fitted to proven unlatched door assemblies.
- 10. Locks may only be fitted to 90/120 minute ITT timber/mineral-based doorset assemblies which have previously been proven unlatched.
- 11. The locks/latches should not be fitted higher than 1100 mm from the finished floor level of the surrounding floors.
- 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 and 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. The spindle hole through the door shall be a maximum of 15 mm diameter unless the doorset has test evidence that proves spindle holes of a greater size than this.
- 14. Recessing for locks and strikeplates shall result in a tight fit, allowing for any intumescent protection where required. Mortices for the latchbolt and deadbolt behind the strikeplate shall be as small as possible.
- 15. Only the AR915 lock models are approved for use as an emergency exit device by TS 31 "The Contribution of Emergency Exit Devices, Operated By A Lever Handle Or Push Pad, To The Performance Of Fire Resisting Door Assemblies" and only when fitted to single leaf doorsets with the approved accessories detailed within the 'Scope of Approval' section of this certificate.
- 16. Timber doorsets shall be installed in accordance with BS 8214.

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### ARRONE Range of 72 mm and 85 mm Locks

- 17. The approval relates to on-going production. Product and/or its immediate packaging is 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.
- 18. The following table shows the acceptable doorset types and fire resistance periods:

|        |     | Аррі | oved Door | Туре |     |
|--------|-----|------|-----------|------|-----|
| Class  | IMM | MM   | ITT       | ITM  | ITC |
| 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

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### ARRONE Range of 72 mm and 85 mm Locks

16. Doors are classified as the following types:

**Code ITT** - 20 minute to 120 minute doorsets containing intumescent seals and consisting of timber faced and edged leaves with timber, cellulosic or mineral cores, hung in timber-based frames.

**Code ITM** - 20 minute to 120 minute doorsets containing intumescent seals and consisting of timber faced and edged leaves with timber, cellulosic or mineral cores, hung in steel frames.

**Code ITC** - 20 minute to 120 minute doorsets containing intumescent seals and consisting of timber faced and edged leaves with timber, cellulosic or mineral cores, hung in proprietary composite frames, of which the principal material is other than timber or metal but which may include any other materials.

**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.

### Approved lock/latch models and classifications.

AR910, AR910-S-55/85 and AR910-R-55/85 Sashlock - BS EN 12209 with 1.4 mm thick lipped strike and AR900/ADJ-STRIKE:

| 3 X 8 1 0 G 4 B A 3 | 0 G 4 B A 3 0 |  | 0 | 1 | 8 | X | 3 |  |
|---------------------|---------------|--|---|---|---|---|---|--|
|---------------------|---------------|--|---|---|---|---|---|--|

AR910 Sashlock - BS EN 12209 with 3 mm thick unlipped strike:

| 3 | X | 8 | 1 | 0 | G | 3 | В | A | 3 | 0 |
|---|---|---|---|---|---|---|---|---|---|---|
|---|---|---|---|---|---|---|---|---|---|---|

AR911 Latch - BS EN 12209:

| 3 | X | 8 | 1 | 0 | G | ı | В | 0 | 3 | 0 |
|---|---|---|---|---|---|---|---|---|---|---|
|---|---|---|---|---|---|---|---|---|---|---|

AR912, AR912-S-55/85 and AR912-R-55/85 Deadlock - BS EN 12209 with 1.4 mm thick lipped strike and AR900/ADJ-STRIKE:

| 3 | X | 8 | 1 | 0 | G | 4 | В | Α | 0 | 0 |  |
|---|---|---|---|---|---|---|---|---|---|---|--|
|---|---|---|---|---|---|---|---|---|---|---|--|

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## **ARRONE Range of 72 mm Locks**

### Approved lock/latch models and classifications - Continued

AR912 Deadlock - BS EN 12209 with 3 mm thick unlipped strike:

| 3 | X | 8 | 1 | 0 | G | 3 | В | Α | 0 | 0 |
|---|---|---|---|---|---|---|---|---|---|---|
|---|---|---|---|---|---|---|---|---|---|---|

AR913 Bathroom Lock - BS EN 12209:

| 3 X 8 1 0 G - B 0 3 0 |
|-----------------------|
|-----------------------|

AR914 Nightlatch - BS EN 12209:

| 3 | Х | 8 | 1 | 0 | G | - | В | 0 | 3 | 0 |
|---|---|---|---|---|---|---|---|---|---|---|
|   |   |   |   |   |   |   |   |   |   |   |

AR915-ESC and AR915-APP Escape Locks - BS EN 12209 with 1.4 mm thick lipped strike:

| 3 | X | 8 | 1 | 0 | G | 4 | В | A | 3 | 0 |
|---|---|---|---|---|---|---|---|---|---|---|
|---|---|---|---|---|---|---|---|---|---|---|

AR915-ESC and AR915-APP Escape Locks - BS EN 12209 with 3 mm thick unlipped strike:

| 3 | X | 8 | 1 | 0 | G | 3 | В | A | 3 | 0 |
|---|---|---|---|---|---|---|---|---|---|---|
|---|---|---|---|---|---|---|---|---|---|---|

AR916 Rollerbolt Locks - BS EN 12209 with 1.4 mm thick lipped strike:

| 3 | С | 8 | 1 | 0 | G | 4 | В | Α | 0 | 0 |
|---|---|---|---|---|---|---|---|---|---|---|
|   |   |   |   |   |   |   |   |   |   |   |

AR916 Rollerbolt Locks - BS EN 12209 with 3 mm thick unlipped strike:

| 3 | С | 8 | 1 | 0 | G | 3 | В | Α | 0 | 0 |  |
|---|---|---|---|---|---|---|---|---|---|---|--|
|---|---|---|---|---|---|---|---|---|---|---|--|

AR755 Roller Latch - BS EN 12209:

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### **ARRONE Range of 72 mm Locks**

### Approved lock/latch models and classifications - Continued

AR915-ESC and AR915-APP Escape Lock - BS EN 179 with 1.4 mm thick lipped strike:

| 3 | 7 | 6 | В | 1 | 4 | 4 | 1 | A | В |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 7 | 6 | В | 1 | 4 | 4 | 1 | Α | D |

AR915-ESC and AR915-APP Escape Lock - BS EN 179 with 3 mm thick unlipped strike:

| 3 | 7 | 6 | В | 1 | 3 | 3 | 2 | Α | В |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 7 | 6 | В | 1 | 3 | 3 | 2 | Α | D |

AR914 nightlatch - BS EN 179 with 1.4 mm thick lipped strike:

| 3 | 7 | 6 | В | 1 | 4 | 4 | 1 | A | В |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 7 | 6 | В | 1 | 4 | 4 | 1 | Α | D |

AR914 nightlatch - BS EN 179 with 3 mm thick unlipped strike:

| 3 | 7 | 6 | В | 1 | 3 | 3 | 2 | Α | В |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 7 | 6 | В | 1 | 3 | 3 | 2 | A | D |

## **Scope of Approval:**

- The locks may not be fitted to timber doorsets without perimeter intumescent fire seals within the frame rebate or door edge.
- ITT door leaves shall have solid lignocellulosic construction in the lock area encompassing the entire lock case.
- Locks may only be fitted to 90/120 minute ITT timber/mineral-based doorset assemblies which have previously been proven unlatched.

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### **ARRONE Range of 72 mm Locks**

#### Scope of Approval – Cont'd:

- <u>Strikeplates/keeps</u> The Hoppe range of locks/latches are approved with a range of strikeplates/keeps. All of which are steel and the a maximum size permitted for use on all doorsets is as follows:
  - Standard ARRORONE 1.4 mm thickness strikeplate/keeps:

| width                 | 24 mm (exc. Lip) |
|-----------------------|------------------|
| height                | 170 mm           |
| Latchbolt- lip height | 54 mm            |

Alternative 3 mm thickness strikeplate/keeps:

| width                 | 20 mm         |
|-----------------------|---------------|
| height                | 170 mm        |
| Latchbolt- lip height | Not permitted |

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

| 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):

| 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 only may incorporate ADJ-TIDY plastic dust boxes to the rear, providing the intumescent protection as detailed in Section 7 is maintained.

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### **ARRONE Range of 72 mm Locks**

### Scope of Approval – Cont'd:

- The escape locks are certified for use on single leaf doorsets only with the following accessories:
  - AR228 Split follower spindle and AR228F half spindle and AR914/915 HS-PLATE in combination with the HOPPE (UK) handle sets referenced below.
  - Paris 138 / 42K, Paris 138S / 42K, AR361/10-UN, AR361/60-UN, AR361/10-SP, AR361/13-72, AR361/60-SP, AR362/60-SP, AR362/60-UN, AR370/60, AR374/60, AR375/60, AR461/10 SP, AR461/13-72, AR600/20 (K138/42), AR600/10 (K138/42), AR600/23-72, E138F/42, E138Z/42K, Marseille 1138/42K, Marseille E1138Z/42K, Marseille 1138/2600-72 and Paris AR200S/33-72.

### **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).

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