



CERTIFICATE OF APPROVAL

No CF 675

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

MANUFACTURAS SANTOS SA

Raso De Alagoa, Apartado 19, 3754-909 Agueda, Portugal
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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

**Santos Range of Locks &
 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 CERTIFIRE



Sir Ken Knight
 Chairman - Management Council
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Issued: 30th October 2009
 Reissued: 9th April 2015
 Valid to: 8th April 2020



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SANTOS Range of Locks and Latches

1. The locks and latches covered by this certificate are all steel cased. This approval relates to the following specific locks:

- 768EQ, 770EQ, 772EQ, 785EQ, 788EQ, 790EQ & 792EQ
- 702PQ
- 701EQ
- 778WQ
- 602EQ
- 673EQ and 672EQ

Models are approved in 50, 55, 60, 65 and 80 mm backsets.

All models are approved in 20 mm and 24 mm width forend with square or radius forend.

All models are approved in SS, PSS, PBS and PB finishes

Forend and strike plate material grades 430, 304 and 316 are approved.

2. This certification is designed to demonstrate compliance of the product or system specifically with Approved Document B (England and Wales), Section D of the Technical Standards (Scotland) and Technical Booklet E (N. Ireland). If compliance is required to other regulatory or guidance documents there may be additional considerations or conflict to be taken into account.
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, intumescent sealed door assemblies consisting of uninsulated or insulated metal door assemblies in metal frames having a fire resistance up to 240 minutes (Code IMM).

Latched and unlatched, door assemblies consisting of uninsulated or insulated metal door assemblies in metal frames without intumescent seals having a fire resistance up to 240 minutes (Code MM).

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5. The locks are approved on the basis of:
 - i) Initial type testing to EN 1634-1 and EN 12209
 - ii) An appraisal against TS23
 - iii) Certification of quality management system to ISO 9001: 2008.
 - iv) Inspection and surveillance of factory production control
 - v) On-going audit testing in accordance with TS23 requirements
6. This approval is applicable only to the specified locks/latches for use with door assemblies of proven fire resistance (as defined in BS EN 1634-1 or BS 476: Part 22: 1987) and, when fitted to timber based doorsets, using appropriate intumescent protection.
7. The required intumescent protection for 30 minute door assemblies will be either intumescent mastic behind the forend and strike plates and around the lock case, or 1 mm thick Interdens intumescent sheet in the same positions. 60 minute doorset assemblies shall be installed with 1 mm thick Interdens intumescent sheet behind the forend and strike plates and around the lock case. It is also required that 60 minute doorsets incorporate 4.5 mm thick, non-combustible, mineral based sub-facings.
8. 90 and 120 minute timber based door assemblies shall have previously been proven unlatched, as either single-leaf or double-leaf door assemblies as required and shall consist of timber faced and edged leaves with timber, cellulosic or mineral cores (Code ITT) not less than 57 mm thick.
9. The required intumescent protection for 90 and 120 minute door assemblies will be 2 mm thick Interdens intumescent behind the forend and strike plates and around the lock case.
10. Failure to install the required intumescent protection will invalidate this approval.
11. Lock assemblies not incorporating a latching mechanism shall only be fitted to proven unlatched door assemblies.
12. Locks may only be fitted to 90/120 minute timber doorset assemblies which have previously been proven unlatched.
13. The locks/latches should not be fitted higher than 1100 mm from the finished floor level of the surrounding floors.

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14. 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.
15. Timber doorsets shall be installed in accordance with BS 8214: 2008.

The following table shows the acceptable doorset types and fire resistance periods:

Class	Approved Door Type					
	IMM	MM	TT	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	✓	✓	✗	✗	✗	✗

See CERTIFIRE Technical Schedules for designation of doorset types i.e. ITT etc.

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90 and 120 Minute Timber Door Assemblies – Frame Requirements

The door frame of ITT 90 and 120 minute door assemblies shall be a mineral cored construction or timber complying with the following requirements:

Mineral cored frames: 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/m³.

Timber frames: shall be 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/m³ (with leaf to frame gaps less than 3mm).

Approved lock/latch models and classifications.

Models: 768EQ, 770EQ, 772EQ, 785EQ, 788EQ, 790EQ & 792EQ

3	M	8	1	0	F	2	B	A	2	0
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Model: 702PQ

3	M	8	1	0	F	-	B	0	2	0
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Model: 701EQ

3	M	8	1	0	F	2	B	A	0	0
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Model: 778WQ

3	M	8	1	0	F	-	B	0	2	0
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Model: 602EQ

3	M	8	1	0	F	-	B	0	2	0
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Approved lock/latch models and classifications (continued).

Models: 673EQ & 672EQ

3	M	8	1	0	F	2	B	A	2	0
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Further Information

Further information regarding the details contained in this certificate may be obtained from Manufacturas Santos SA (Tel: + 35 1234 630680).

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

