



Statement on the influence of locks to the fire resistance of doors

| Requested by: Abloy Oy



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Statement on the influence of locks to the fire resistance of doors

Request The client requests a statement concerning the influence of lock types to the fire resistance of doors. The lock types are presented in Table 1.

The client has sent construction confirmations from the lock types that have corresponding mechanical and electrical constructions than locks that have been tested at VTT.

Table 1. The lock types

Series	The lock types	Backsets	Distance between cylinder and spindle	Operating principle
EL52X	EL520 and EL522	55 to 100 mm	72 mm PZ, 74 mm RZ	Motor lock
	EL524	50	70 mm	
EL56X	EL560, EL561, EL562 and EL563	55 to 100 mm	72 mm PZ, 74 mm RZ	Solenoid lock
	EL564 and EL565	50	70 mm	
EL36X	EL360 and EL362	55 to 100 mm	72 mm PZ, 74 mm RZ	Mechanical lock with microswitches
	EL365	50	70 mm	
EL16X	EL160 and EL162	55 to 100 mm	72 mm PZ, 74 mm RZ	Mechanical lock
	EL165	50	70 mm	

Test results Following test reports of VTT support this statement:

- RTE1238/05
- RTE2020/05
- RTE1202/04

Statement

We state as our opinion that above mentioned locks used in the metal, wooden or glazed wooden doors do not decrease classification of the doors as shown below:

1. The locks can be used in the following doors **classified according to European standard EN 13501-2** (tested according to European standard EN 1634-1) without that classification of the door decreases:

- In metal doors:
Classes from EI₁15 to EI₁60 and Classes from EI₂15 to EI₂60
- In wooden doors:
Classes from EI₁15 to EI₁30 and Classes from EI₂15 to EI₂30
- In double or single leaf glazed wooden doors:
Classes from EI₁15 to EI₁30 and Classes from EI₂15 to EI₂30

2. The locks can be used in the following doors **classified in Finland** without that classification of the door decreases:

- In metal doors: Classes from EI15 to EI120
- In wooden doors: Classes from EI15 to EI30
- In double or single leaf glazed wooden doors: Classes from EI15 to EI30

All locks shall be fixed according to the installation instruction given by Abloy Oy.

In appendices 1 to 5 is presented general drawings of the locks and installation drawing for hardware of the locks. Detail drawings of the locks are stored in the archive of VTT with this statement.


Annotation

If any changes are made to the construction of the locks this statement is not valid.

This statement is not the approval of the products but the evaluation of the fire resistance of these constructions.

Espoo, 30 June 2005


Riitta Kajastila
Group Manager


Olavi Tenhunen
Senior Research Scientist

APPENDICES

- Appendix 1 Installation drawing
Appendix 2 Drawing of lock types EL520, EL522, EL360, EL362, EL160 and EL162
Appendix 3 Drawing of lock types EL560, EL561, EL562 and EL563
Appendix 4 Drawing of lock types EL524 and EL165
Appendix 5 Drawing of lock types EL564 and EL565

DISTRIBUTION

Client, 2	Original
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