

Statement on the influence of locks  
manufactured by Abloy Oy to the fire resistance  
of metal doors, wooden doors, glazed metal  
doors and glazed wooden doors

| Requested by: Abloy Oy

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**Requested by** Abloy Oy  
P.O. Box 108  
FI-80101 JOENSUU, Finland

Order: Verbal order on 7 September 2005 by Mr. Esa Parjanen from Abloy Oy

**Contact person at VTT** VTT TECHNICAL RESEARCH CENTRE OF FINLAND  
VTT BUILDING AND TRANSPORT  
Matti Immonen  
P.O. Box 1803 (Street address: Kivimiehentie 4, FI-02150 ESPOO)  
FI-02044 VTT, Finland  
Tel. + 358 9 45678081  
Fax + 358 9 4564815  
E-mail: matti.immonen@vtt.fi

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**Statement on the influence of locks manufactured by ABLOY OY to the fire resistance of metal doors, wooden doors, glazed metal doors and glazed wooden doors**

**Request for comment** The client requested a statement concerning influence of the lock types 8164, 8164 + EL651, EL580, EL854, EL854+EL557 to the fire resistance of metal doors, the lock type EL 580, EL854, EL854+EL557 to the fire resistance of wooden doors and glazed wooden doors and the lock type EL807, EL480 to the fire resistance of glazed metal doors. The client has also send construction confirmations from lock types that have corresponding mechanical and electrical constructions than the locks that have tested at VTT. Equivalencies are shown in the following table 1:

*Table 1. Equivalence of lock types*

Tested type of lock	Corresponding type of lock
8164	8165, EL752, EL806, EL754 and EL755
EL651	EL648, EL650, EL652...EL655
EL580	EL582
EL854	EL554
EL557	EL555 and EL855
EL480	EL482
EL807	8329

**Test results** Following test reports of VTT support this statement:

- Test report No. RTE3169/02

- Test report No. RTE3846/02
- Test report No. RTE379/03
- Test report No. RTE2274/03\*
- Test report No. RTE4188/03
- Test report No. RTE4189/03
- Test report No. RTE1797/04
- Test report No. RTE2321/04

\* Kenset Oy has delivered an approval that VTT can use information of the test report base of this statement to Abloy Oy.

## Statement

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

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

- Metal doors equipped with a combination of the lock types 8164 + EL651 or with corresponding locks as shown in table 1:  
Classes from EI<sub>1</sub> 15 to EI<sub>1</sub> 30 and from EI<sub>2</sub> 15 to EI<sub>2</sub> 30
- Metal doors equipped with a combination of the lock types EL854 + EL557 or with corresponding locks as shown in table 1:  
Classes from EI<sub>1</sub> 15 to EI<sub>1</sub> 60 and from EI<sub>2</sub> 15 to EI<sub>2</sub> 60
- Metal doors equipped with the lock of types 8164, EL580, EL854 or with corresponding locks as shown in table 1:  
Classes from EI<sub>1</sub> 15 to EI<sub>1</sub> 60 and from EI<sub>2</sub> 15 to EI<sub>2</sub> 60
- Glazed metal doors equipped with the lock type EL807, EL480 or with corresponding locks as shown in table 1:  
Classes from EI<sub>1</sub> 15 to EI<sub>1</sub> 60 and from EI<sub>2</sub> 15 to EI<sub>2</sub> 60
- Wooden doors and glazed wooden doors equipped with a combination of the lock types EL854 + EL557 or with corresponding locks as shown in table 1:  
Classes from EI<sub>1</sub> 15 to EI<sub>1</sub> 30 and from EI<sub>2</sub> 15 to EI<sub>2</sub> 30
- Wooden doors and glazed wooden doors equipped with the lock type EL580, EL854 or with corresponding lock as shown in table 1:  
Classes from EI<sub>1</sub> 15 to EI<sub>1</sub> 30 and from EI<sub>2</sub> 15 to EI<sub>2</sub> 30



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

- Metal doors equipped with a combination of the lock types 8164 + EL651 or with corresponding locks as shown in table 1:

Classes EI 15 or EI 30

- Metal doors equipped with a combination of the lock types EL854 + EL557, or with corresponding locks as shown in table 1:

Classes EI 30 or EI 60

- Metal doors equipped with the lock of types 8164, EL580, EL854 or with corresponding locks as shown in table 1:

Classes from EI 15 to EI 60

- Glazed metal doors equipped with the lock of type EL807, EL480 or with corresponding locks as shown in table 1:

Classes from EI 15 to EI 60

- Wooden doors and glazed wooden doors equipped with a combination of the lock types EL854 + EL557 or with corresponding locks as shown in table 1:

Classes from EI 15 or EI 30

- Wooden doors and glazed wooden doors equipped with the lock type EL580, EL854 or with corresponding lock as shown in table 1:

Classes from EI 15 or EI 30

All locks shall be fixed according to the installation instruction given by Abloy Oy. In appendices number 1 to 4 is presented general drawings of the locks and installation drawing for hardware of each type of lock. Complete drawings of the locks are stored in the archive of VTT with this test report.

#### Annotation

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

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

Espoo, 7 September 2005



Riitta Kajastila  
Group Manager



Matti Immonen  
Research Engineer

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APPENDICES	Appendix 1	Drawing of lock type 8164 and installation drawing
	Appendix 2	Drawing of lock type EL651 and installation drawing
	Appendix 3	Drawing of lock type EL580 and installation drawing
	Appendix 4	Drawing of lock type EL807 and installation drawing
	Appendix 5	Drawing of lock type EL854, EL557 and installation drawing
	Appendix 6	Drawing of lock type EL480 and installation drawing

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