Southampton

ESTATES & FACILITIES

Document Title Lock products

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Revision Index

Revision	Date of Revision	Revised by	Revision made
1	30/10/17	Steve Parker	Details extracted from memo issued by Steve Feast in September 2007. Details checked with Shane Parkes for continued relevance October 2017.

UNIVERSITY OF SOUTHAMPTON

STANDARD SPECIFICATION FOR LOCK PRODUCTS

Foreward:

This standard specification contains details of preferred arrangements for lock products installed as part of University projects. In the event of there being any conflict between this specification and Building Regulations, other statutory requirements, perceived best practice or the client brief, then these contradictions are to be brought to the attention of the project manager in the first instance.

Further support and guidance can also be provided by Shane Parkes, Locksmith Supervisor on 023 8059 3382 extension 23382 or at <u>S.T.Parkes@soton.ac.uk</u>.

There are five standard concerns regarding lock products:

1. Security standards

All products being specified will need to meet EN standards. The security provided by locking systems is determined not only by the grade given to the product but, as part of a holistic system, also by the quality and thickness of the door into which the lock is fitted and the quality of the workmanship employed during fitting.

Most locks can be fitted in a number of differing applications, it is therefore vital that apertures are cut in the door which exactly match the chosen application.

For example a Mortice Night latch can be activated internally by either a level handle or cylinder thumbturn. Externally the same lock is activated generally by key only, with the lever handle being used only as a means to pull the door to and support the bolt through fixings. In order to maintain good levels of security therefore it is essential that the spindle hole cut through the door from the inside should not continue through and out of the external face of the door under the lever furniture. If this were to happen and the external lever handle broken off, the spindle would be exposed and capable of being used to activate the lock. Bolt through fixings on level handles, removable from inside only, are recommended.

2. DDA Regulations compliance

DDA compliance is important throughout a building and can impact heavily upon the choice of products to be used in locking systems.

The lever handle should be fitted at a height of 1000 mm from the floor.

Bolt through level handles are recommended for two reasons. Firstly, they are stronger which is important since disabled people will often use a handle for support.

Secondly, lever handles of recommended dimensions can be used by body parts other than the hand i.e. elbows and forearms.

Lever furniture colour should contrast with door colour to aid visually impaired users.

Lever handles should be fitted at last 72 mm from the centre of the lock cylinder so that key and handle use are not unduly restricted.

The whole lock mechanism should be fitted so that minimum force is required to action it. With locks on escape routes, a single action to open the door is required.

The less complicated the locking system is the better; it can be used by people with learning difficulties.

3. Fire Safety Regulation compliance

All applications specified must meet fire regulation standards. Locks fitted on fire escape doors must be capable of opening the door with a single action.

Depending upon the location and application final escape doors should be fitted with crash bars or panic hardware.

If external locking attachments are to be specified on doors with panic hardware, then a type which will accept a standard sized, half, Euro profile cylinder will be required.

4. Compatibility with both Yale and Mul-T-Lock Euro Profile cylinders

All locking hardware will be operated by either Yale or Mul-T-Lock Euro profile cylinders.

The standard length of cylinder supplied is 66 mm long. Doors with a greater thickness than 44 mm, or where the lock case will be fitted off centre, will require special orders. Where client departments are moving and wish to retain existing lock cylinders the length of the cylinder needs to be matched to door thickness.

5. Master key suiting

All University departments utilise unique, dedicated Master key suites.

It is vital that client departments approve suiting arrangements for the areas they will occupy. This includes Estates and Facilities.

The Locksmith Team will meet and discuss with client departments their suiting arrangements and will produce lock cylinder and key schedules to meet their requirements.

NOTE that this process can often be drawn out and so should be started early on in the project. A basic requirement will be agreed floor layout plans and occupancy details. Ironmongery schedules should also be issued to the Locksmith Team as soon as they are available.

NEMEF Lock cases

BS 5588 lays down a code of practice for fire precautions in buildings, and BS3621 lays down the criteria required for thief resistant locks.

A lock cannot comply with both BS 3621 and BS 5588 requirements and therefore a balance dependant upon needs must be found.

Taking on board the above mentioned concerns, and factoring in Regulation 7 of the Building Regulations which pertains to quality and life cycle costs, if fitted correctly the NEMEF 6100 range of lock cases with either the Yale or Mul-T-Lock euro profile cylinders will meet most of the Universities locking needs.

The 6100 series has been successfully approved for use on fire doors and therefore carries the CE marking.

The category of use achieved is the highest Grade 3 (low care incentive, high probability of misuse (public buildings)), whereas many other similar manufacturers have only gone for Grade 2 (some care incentive, some misuse (offices)) in line with BS 3621. Security Grade is either 6 or 2

The 6100 series of lock cases, when used in conjunction with NEMEF 3253 Aluminium door furniture 72 mm(approved under EN 1906.) meet the requirements of BS8300 and can therefore be used on projects where DDA has to be considered.

In particular the NEMEF 6102 PANIC SPLIT FOLLOWER, (SS finish and Square F/End) with VS4000 box strike (approved under EN 179).

The split follower allows the internal lever handle to withdraw both the latch and bolt in a panic situation. Externally the latch bolt is operated by lever handle and the deadbolt by key.

Most of the 6100 series is handed and so careful attention must be paid to both the handing of the door and the handing requirements of the lockcase application. (See attached diagram as a guide), generally the fig reference is quoted whilst ordering.

Both the split spindle (ref 59102156) and the VS4000 box strike are sold as separate items.

In some cases, it might be worth considering the spring strength of the package. All NEMEF lock cases are heavy sprung as standard. NEMEF 3253 handles are also sprung. Therefore the full set may be too strong for some people to operate. In this case, the lock can be supplied with a lighter follower spring (still approved under EN 12209) this would reduce the effort required to operate smoothly.

NEMEF Range

1. NEMEF - NEM6102 PANIC SPLIT 60MM SS 20MM SQ ANTI PANIC SASH LOCK CASE (HANDED FIG 1 TO FIG 4) CHOOSE AND STATE HAND.

- 2. NEMEF 3253P LEVER FURNITURE 72MM CNETRES SAA RND.
- 3. NEMEF NEM VS4000 BOX STRIKE BLACK.
- 4. NEMEF NEM 4918 SPLIT SPINDLES 8 MM 47/47MM 59102156.
- 5. E66T CYLINDER.

SASH LOCK

1. NEMEF SASH LOCK 6109/17 60MM SS 20MM SQ SASH LOCK CASE (NOT HANDED) WITH SPINDLE.

2. NEMEF HANDLES 3253P LEVER FURNITURE 72MM CENTRES SAA RND.

- 3. NEMEF NEM VS400 BOX STRIKE BLACK.
- 4. E66T CYLINDER.

PANIC SASH LOCK (internal level handle only no thumb turn)

1. NEMEF - NEM6102 PANIC SPLIT 60MM SS 20MM SQ ANTI PANIC SASH LOCK CASE (HANDED FIG 1 TO FIG 4) CHOOSE AND STATE HAND.

2. NEMEF 3253P LEVER FURNITURE 72MM CENTRES SAA RND 3253/17/721 FOR FIG 1 OR 3253/17/722 FOR FIG 2 TO MATCH HANDING OF LOCKCASE.

- 3. NEMEF NEM VS4000 BOX STRIKE BLACK.
- 4. NEMEF NEM 4918 SPLIT SPINDLES 8MM 47/47MM 59102156.
- 5. ES42.5 MM CYLINDERS.

SECURITY NIGHTLATCH

1. NEMEF - NEM6107/27 60MM SS 20MM SQ SECURITY NIGHTLATCH LOCK CASE WITH AUXILLIARY BOLT (HANDED FIG 1 TO FIG 4) CHOOSE AND STATE HAND.

2. NEMEF 3253 FP LEVER FURNITURE 72 MM CENTRES SAA RND TO MATCH HANDING OF LOCKCASE.

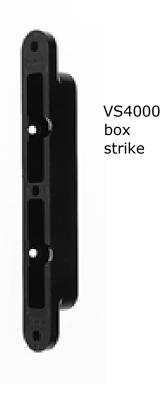
- 3. NEMEF NEM VS4228 BOX STRIKE BLACK.
- 4. NEMEF NEM BOLT THROUGH SPINDLE.
- 5. ES42.5MM CYLINDERS.

<u>I S O</u>			NEMEF
			Fig 1
6/0	ENGLISH	L H INWARD	
0/0			
	GERMAN	R H INWARD R H NWARD (RS)	
	GERMAN	(DIN LS)	
			Fiq 2
5/0	ENGLISH	R H INWARD	
	DUTCH	L H INWARD	
	GERMAN	L H NWARD (LS)	
	GERMAN	(DIN RS)	
			Fig 3
6/1	ENGLISH	L H OUTWARD	
	DUTCH	R H O UTW ARD	
	GERMAN	L H OUTWARD (LS)	
	GERMAN	(DIN LS)	
			Fig 4
5/1	ENGLISH	R H OUTWARD	
	DUTCH	LH OUTWARD	
	GERMAN	R H OUTWARD (RS)	
	GERMAN	(DIN RS)	

Door Handing Details



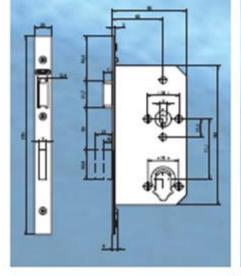
NEMEF 3253 Aluminium door furniture 72 mm



6100 series



Dimensions according to DIN 18251 - part 1 (Class II) extra heavy-duty project lock non-handed



Lock functions

- #109 Sash lock/entrance lock
- 108 Deed bolt lock
- 105 Latch
- #107 Night latch
- #106 Night latch with hold back function
- #104 Bethroom/wc lock
- #102 Panic lock

Specifications

- · Zinc-plated white lacquered lock case
- Backget é0 mm
- · Centres 72 mm (bethroom/wclock 78 mm)
- · Sintered steel latch and dead bolt
- · Forend 20 x 235 mm, squere statuless steel.
- · 2-pieced steel damping follower 8 mm
- · Extra heavy-duty counter spring
- · Sutable for ovel as well as euro profile cylinder
- . Key action on latch bolt
- Centified for 4 hours fire-resistant according to 85 476 part 22, 1997, dause 8
- · Easily reversible latch bolt
- Packed per piece, including strike plate, screws and mounting instructions

Options

- Auxiliary latch on 6106, 6107, 6109 (non revenible)
- Ughter counter spring version for enti-ligature
 purposes





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Appendix 1 – page 1 EC-CERTIFICATE OF CONFORMITY

0960 - CPD - 427.004

dated 2006-06-15

Lock type 6102 produced and placed on the market by

> NEMEF B.V. Papegaaiweg 35 Wenum Wiesel The Netherlands

Article	Specification	Designation according to EN 179								
NEMEF 6102	Type 5102 with stainless steel forend 20 mm and sintered latch and in combination with: 5300 series stainless steel project furniture 5400 series stainless steel project spring furniture 3400 series aluminium security furniture rounded 5500 series aluminium security furniture rounded 5500 series steinless steel security furniture 3200 series steinless steel security furniture	3	7	6	1	1	3	4	2	A