THE UNIVERSITY OF NEWCASTLE AUSTRALIA

The University of Newcastle

Infrastructure and Facilities Services

Project Briefing Document

Door & Lock Furniture Design Standards

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Revision Summary	
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5.0	Updated to include information on requirement to use UON Building Services Maintenance contractor.

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1 PURPOSE

The IFS Project Briefing Document – Door & Lock Furniture Design Standards sets out the University of Newcastle's (UON) requirements for product selection of door furniture as part of the design and construction standards. It ensures new and refurbished buildings at the University are fit-for-purpose, made from durable good-quality materials, and are cost efficient to operate and maintain.

Applicable requirements documented in Workplace Health and Safety legislation, Disability Discrimination legislation, Commonwealth and State legislation, National Construction Codes (NCC), the Building Code of Australia (BCA) and Australian and New Zealand Standards (AS/NZS) are the minimum and mandatory compliance requirements.

Where any ambiguity exists between this standard and the mandatory requirements then:

a. the highest performance requirements must apply.
b. applicable requirements must follow this order of precedence:

    i. Workplace Health and Safety legislation.
    ii. Disability Discrimination legislation.
    iii. All other Commonwealth and State legislation.
    iv. NCC and BCA
    v. AS/NZS.
    vi. This standard and other University of Newcastle standards.

2 SCOPE

These standards describe the requirements for door and lock furniture selection throughout all buildings owned, operated, and managed by the University of Newcastle.

The standards apply to all planners, project managers, consultants, contractors, sub-contractors, tenants, managing agents and University staff involved in the selection of door and lock furniture of existing, new, and proposed University buildings and facilities.

Where specific applications are not explicitly covered or ambiguity exists, the intent of the design standard must be satisfied. In such cases a return design brief must be provided for review and approval by the issuer of this standard or their appointed delegate who must have relevant technical competence in the subject matter. Any deviation from this standard must be approved by University of Newcastle facilities staff prior to completion.

The Standard provides:

a. A reference document to enable consistency with the design and engineering objectives.
b. Details of the minimum performance requirements for Planning, Architectural Design, and Maintenance.
c. Support of the Strategic Asset Management Plan for the built environment and best practice.

The Standard addresses key objectives:

a. Quality design which responds, enhances, and complements the environment.
b. Appreciation of the heritage context and cultural history of the campuses.
c. Value for money in all aspects of the project.
d. Longevity of construction approach to design.
e. Standardization of key ancillary details.
f. Flexibility to future proof building usage for expansion or adaption to new uses.

The UON representative must engage the UON Building Maintenance Services contractor under the current Hard Services Maintenance Agreement for Building Maintenance Services to provide the UON cylinders, create a lock and key schedule, order, supply, install and issue of all UON cylinders & keys. UON cylinders can be ordered on project start up, once final floor layout has been confirmed. UON cylinders are to be fitted by the UON Building Maintenance Services contractor as part of the project handover process.

3 GLOSSARY OF TERMS

AS	Australian Standard
BCA	Building Code of Australia
FFL	Finished Floor Level
IFS	Infrastructure & Facilities Services
NCC	National Construction Code
UON	University of Newcastle
WHS	Work Health & Safety

4 AUTHORITIES AND RESPONSIBILITIES

This standard is issued by IFS. It is approved by the Associate Director – Campus Services IFS. The IFS Campus Services team are responsible for maintaining the Standard and keeping it up to date. The Standard must be reviewed biennially.

5 TECHNICAL REQUIREMENTS

5.1 DESIGN AND DOCUMENTATION

The UON Lock and Key System provides the University with a standardised reputable lever action lock that meets all Australian Standards for commercial use. Incorporated with a Lockwood 570 (Bi-Lock at Ourimbah) Oval cylinder exclusive to the UON is a restricted security patent, keyed to the multi-tiered UON master key system. This prevents duplication by any other key supplier, staff member or student, providing increased security for the University.

All door furniture products are to be Lockwood Brand as outlined in the Door Furniture Schedules Table 1-3 below. No other brand will be accepted. Only new materials, equipment and components are to be installed.

5.1.1 Design Approach

The Door and Lock Furniture Schedule outlines requirements for door and lock furniture dependent upon:

- Door Type
- Building and Room Function
- Lock Type
- External or Internal Handle
- Lock Function
- Cylinder Requirements
- CAM

Table 1: Standard Door Furniture Schedule for ALL New Work. - Timber Swing Doors

Lockwood Products; Mechanical Locks – Electronic mortice locks noted in red (Refer to Electronic Security Design Standards)

DOOR TYPE	LOCATION	LOCK	EXTERNAL HANDLE	INTERNAL HANDLE	LOCK FUNCTION	CYLINDER Y/N	CAM
Single Leaf	**External to Building**	Electronic Lock	1801/70SC	1905/70SC	Storeroom	Yes	X7
Single Leaf	**Laboratory**	Lockwood 3772	1801/70SC	1905/70SC	Storeroom	Yes	X7
Single Leaf	**PC2 Laboratory**	Electronic Lock	1801/70SC	1905/70SC	Storeroom	Yes	X7
Single Leaf	**Tutorial room**	Lockwood 3772	1801/70SC	1905/70SC	Classroom	Yes	V
Single Leaf	**Lecture Theatre**	Electronic Lock	1801/70SC	1905/70SC	Storeroom	Yes	X7
Single Leaf	**Classroom / Teal**	Lockwood 3772	1801/70SC	1905/70SC	Classroom	Yes	V
Single Leaf	**General Office**	Lockwood 3772	1801/70SC	1904/70SC	Office	Yes	V + snib adapter
Single Leaf	**Plantroom, Electrical Distribution Board, Service riser**	Lockwood 3772	1801/70SC	1905/70SC	Storeroom	Yes	X7
Single Leaf	**Staff Amenity**	Lockwood 3772	1841/70SC	1904/70SC	Escape Privacy Latch	No	NA
Single Leaf	**Disabled Amenity**	Lockwood 3772	1814/70SC	1939/70SC	Escape Privacy Latch	No	NA
Single Leaf	**Network Room**	Electronic Lock	1801/70SC	1905/70SC	Storeroom	Yes	X7
Single Leaf	**Common Area (printer etc.)**	Lockwood 3772	1805/70SC	1905/70SC	Passage	No	NA
Single Leaf	**Lunchroom, Meeting Room**	Lockwood 3772	1805/70SC	1905/70SC	Passage	No	NA
Single Leaf	**Electrical Substation**	Lockwood 3772	1801/70SC	1905/70SC	Storeroom	Yes	X7
Single leaf	**Storeroom**	Lockwood 3772	1801/70SC	1905/70SC	Storeroom	Yes	X7
Single Leaf	**Cleaners Room**	Lockwood 3772	1801/70SC	1905/70SC	Storeroom	Yes	X7
Single Leaf	**General Amenity**	Push / Pull plates	Nil	Nil	Nil	No	NA

Table 2: Standard Door Furniture Schedule for ALL New Work. – Aluminium Glazed Swing Doors

Lockwood Products; Mechanical Locks – Electronic mortice locks noted in red (Refer to Electronic Security Design standards)

DOOR TYPE	LOCATION	LOCK	EXTERNAL HANDLE	INTERNAL HANDLE	LOCK FUNCTION	CYLINDER Y/N	CAM
Single Leaf	**External to Building**	Electronic Lock	4801/70SC	4905/70SC	Storeroom	Yes	X7
Single Leaf	**Laboratory**	Lockwood 3582	4801/70SC	4905/70SC	Storeroom	Yes	X7
Single Leaf	**PC2 Laboratory**	Electronic Lock	4801/70SC	4905/70SC	Storeroom	Yes	X7
Single Leaf	**Tutorial room**	Lockwood 3582	4801/70SC	4905/70SC	Classroom	Yes	V
Single Leaf	**Lecture Theatre**	Electronic Lock	4801/70SC	4905/70SC	Storeroom	Yes	X7
Single Leaf	**Classroom / Teal**	Lockwood 3582	4801/70SC	4905/70SC	Classroom	Yes	V
Single Leaf	**General Office**	Lockwood 3582	4801/70SC	4904/70SC	Office	Yes	V + snib adapter
Single Leaf	**Staff Amenity**	Lockwood 3582	4841/70SC	4904/70SC	Escape Privacy Latch	No	NA
Single Leaf	**Network Room**	Electronic Lock	4801/70SC	4905/70SC	Storeroom	Yes	X7
Single Leaf	**Common Area (printer etc.)**	Lockwood 3582	4805/70SC	4905/70SC	Passage	No	NA
Single Leaf	**Lunchroom, Meeting Room**	Lockwood 3582	4805/70SC	4905/70SC	Passage	No	NA
Single Leaf	**Storeroom**	Lockwood 3582	4801/70SC	4905/70SC	Storeroom	Yes	X7
Single Leaf	**Cleaners Room**	Lockwood 3582	4801/70SC	4905/70SC	Storeroom	Yes	X7

Table 3: Standard Door Furniture Schedule for ALL New Work. – Sliding Doors

Lockwood Products; Mechanical Locks – Electronic mortice locks noted in red (Refer to Electronic Security Design Standards)

DOOR TYPE	LOCATION	LOCK	EXTERNAL HANDLE	INTERNAL HANDLE	LOCK FUNCTION	CYLINDER Y/N	CAM
Cavity & Surface Mounted (Timber)	**All**	Lockwood 3573	Flush pull or surface mounted D handle	Flush pull or surface mounted D handle	Vestibule	Yes	X7
Cavity & Surface Mounted (Aluminium)	**All**	Lockwood 3540	Flush pull or surface mounted D handle	Flush pull or surface mounted D handle	Vestibule	Yes	X7
Roof Hatches	**All**	Port Clips	Nil	Factory installed	Nil	N/A UON Padlock	Nil

Automatic doors	**All**	Factory installed	Factory installed	Factory installed	Factory installed	(L&F 24) **93204** Lock-It-Well Override	NA

5.1.2 Engineering Process

All door and lock furniture is to be fitted at the height complying with National Construction Code, Australian Standards, and BCA.

All 1+1/2 leaf and Double leaf timber swing doors are to have the same location specifications, hardware, function and handing as a single leaf timber swing door (listed above). Fixed leaf to be secured by external barrel bolts – top and bottom. Rebate kit to be supplied for rebated doors.

All 1+1/2 leaf and Double leaf aluminum swing doors are to have the same location specifications, hardware, function and handing as a single leaf aluminum swing door (listed above). Fixed leaf to be secured by external barrel bolts – top and bottom.

All Fire doors single leaf, 1+1/2 leaf and double leaf are to have the same location specifications, hardware, function and handing as single leaf timber doors (listed above). Swing leaf secured by the appropriate sequence selectors and hold back magnets where necessary. Rebate kit to be supplied for rebated doors.

5.1.3 Interface with other Design Standards

Where there is a requirement for the door and lock furniture to be fitted on Access Control Doors the Electronic Security Design Standard will need to be referenced.

6 COMMISSIONING

The UON operates its own restricted security patent Lockwood 570 (Bi-Lock at Ourimbah) Oval cylinder . During construction the cylinder for door and lock furniture must be tested operationally with a Lockwood 570 Oval construction cylinder by the Principal Contractor. Construction cylinders are to be removed and UON cylinders fitted by the UON Building Maintenance Services contractor as part of the project handover process.

Following building handover to the UON, all contractors requiring access to the building shall follow the University's key loan policy, obtaining and returning keys each day as required from Infrastructure and Facilities Services.

7 AUTHORISATION OF VARIATIONS

Project managers, consultants, contractors, commissioning agents and facilities maintenance personnel must ensure compliance with these requirements is achieved.

Variations to this standard must only be considered where:

a. the University Standards requirement cannot physically or technically be achieved.

Any change of equipment must be approved in writing from IFS. It must not be assumed that a change of product will be approved.

8 QUALITY CONTROL

8.1 DESIGN STANDARD COMPLIANCE

Compliance with requirements of this standard must be checked throughout the construction and commissioning phases of projects by IFS representatives.

8.2 DESIGN STANDARD CERTIFICATION

Notwithstanding IFS' internal quality control processes, contractors and their consultants must implement their own robust quality assurance and control procedures to ensure compliance with requirements of this standard.

8.3 ACCEPTANCE

The University will only accept projects as complete when all the above have been carried out, submitted, and verified.