DOOR HARDWARE SCHEDULING

INTRODUCTION

This TECHnote outlines the two alternative approaches to specifying door hardware that have been provided for in the schedules in NATSPEC's *0455 Door hardware* worksection: two-stage scheduling and proprietary scheduling.

TWO-STAGE SCHEDULING

On larger, more complex projects, rather than preparing detailed door hardware schedules themselves, many architects or designers engage a specialist for the task. In this approach specifiers need to prepare a selection schedule which functions as the briefing document used by a door hardware consultant, manufacturer or supplier to prepare a detailed door-by-door hardware schedule.

Stage 1: Selection schedule

Initially, specifiers identify the types of door hardware required for broad classes or groups of rooms based on their function, e.g. offices, storerooms, toilets, fire exits. Specialist buildings like hospitals often have well-defined room function groups and well-defined hardware requirements. Specifiers can document their hardware requirements for each room type in the **Door hardware selection schedule** in *0455 Door hardware*.

Stage 2: Door-by-door schedule

The completed *0455 Door hardware* worksection including the **Door hardware schedule** can be used by a hardware specialist to prepare a door-by-door schedule showing the details of every hardware item. The preparation of door-by-door schedules is usually provided by door hardware manufacturers or suppliers as part of their service.

This sort of schedule is usually prepared using purpose-made software. Once data has been entered into the software's database, it can be used to create reports in several formats, e.g. inventories of every hardware item, which simplify costing and ordering.

If a door-by-door schedule has not been prepared before tendering begins, a selection schedule customised for the project will contain enough information for tenderers to obtain competitive prices from hardware subcontractors. The format may follow NATSPEC's or your own office's documentation policy.

Customising the NATSPEC door hardware worksection

Make the following selections for the locks and latches of each room function group:

Classification ratings to AS 4145.2 Section 3 *Performance requirements*, covering durability, cylinder security, physical security (strength), keying security and corrosion. Guidance for the selection of these ratings is given in AS 4145.1 Appendix A.

- Lock description/action to suit the room function, e.g. passage latch.
- Manufacturer, hardware series, handle or knob style, escutcheon plate style, finish for each lock type required, e.g. standard and narrow stile.
- Keying, e.g. keyed to differ (KD). See sidebar for abbreviations.

Note other door hardware items required including bolts, panic exit devices, furniture, handles and plates, closers, door controllers, electronic controls, hanging systems and ancillary hardware items.

PROPRIETARY SCHEDULING

The alternative to the two-stage scheduling process described above is to directly specify proprietary door hardware items required for each door. The **Door hardware schedule** included in the worksection can be used for this purpose. This approach is more common for smaller commercial or domestic projects.

EXAMPLE SCHEDULE

The schedule on the following page is an example of a door hardware selection schedule that has been downloaded from **Technical Resources** at www.natspec.com.au and customised for a typical office building. It documents the door hardware requirements for each room type in the project. Supporting information, such as abbreviations used, gives the recipient a full picture of what is required. It should be accompanied by a set of general arrangement drawings.

The downloadable schedules are available in MS Word (.doc) or Excel (.xls) formats and are set up to print on an A3 sheet.

AS 4145.1 rating system for locksets

The rating system categories and the designations for each are as follows:

- Lockset security: S_L1 – S_L10
- Lock security: S1 – S10
- Durability: D1 – D10
- Corrosion: C1 – C10
- Key security: K1 – K10
- Cylinder security: S_C1 – S_C10

AS 4145.1 Appendix D keying abbreviations

CMK: Construction keyed
CK: Change key
GGGMK: Great great grand master key
GGMK: Great grand master key
GMK: Grand master key
KD: Keyed to differ
KA: Keyed alike
MAIS: Maison keyed
MK: Master key
SKD: Single key differ
MTA: Maison to accept
VKC: Visual key control

Relevant standards

AS 4145 series *Locksets and hardware for doors and windows:*
Part 1 *Glossary of terms and rating system*
Part 2 *Mechanical locksets for doors and windows in buildings*
Part 5 *Controlled door closing devices (EN 1154:1997, MOD)*

Relevant worksections

0451 Windows and glazed doors
0453 Doors and access panels
0455 Door hardware
0456 Louvre windows
0457 External screens
0527 Room dividers
0981 Electronic security

DOOR HARDWARE SCHEDULING

DOOR HARDWARE SELECTION SCHEDULE

Project details
Project name: Acme Industries
Project location: Fortitude Valley QLD 4006
Building description: 3 storey office building with 1 level of basement carparking
Reference drawings: A101c, A102d, A103c, A104c, A105b

Door hardware requirements
Manufacturer: KABA
Hardware finish: SCP or SSS
Lever/rose furniture series: 270-25
Lever/plate furniture series - standard width: 600-25 - concealed fixing
Lever/plate furniture series - Narrow style: N600
Push plates and pull handles on plates series: 5250 - concealed fixing
Entrance handles: PH3605UFSSS
Door closers: 7000 Series generally, 9000 Series for high use doors
Door stops: Wall mounted where possible, floor mounted elsewhere

Property abbreviations

Door leaf/frame type

AL	Aluminium
Dbl	Double door
GA	Glazed aluminium shopfront
MDF	Medium density fibreboard
SC	Solid core
ST	Steel

Lock furniture type

LP	Lever on plate
LPNS	Lever on plate - Narrow stile
LR	Lever on rose
PH-HP	Pull handle on handle plate
PP	Push plate

Notes
All terminology, abbreviations, ratings and classifications for the following items to AS 4145.1:
Lock function, Keying, Durability rating, Keying security, Cylinder security, Physical security of locks, Physical security of door locksets and Corrosion classification.
Door handing to be designated by supplier by reference to drawings

Door and door hardware schedule

Room type	Interior or exterior	Door leaf/frame type	Fire rating (FRL)	Closer	Door seal type	Electronic control	Lock furniture type	Lock function	Keying	Durability rating	Keying security	Cylinder security	Physical security of locks	Physical security of locksets	Corrosion class.	Notes
Entry	Exterior	GA/GA	~	Yes	Weather	~	LPNS	Vestibule lock	MK	D8	K7	Sc6	S5	SL5	C7	Entrance handles
Office Area off public areas	Interior	SC/ST	~	Yes	~	Card reader access, push button exit	LP	Vestibule lock	MK	D7	K7	Sc6	S5	SL5	C6	
Offices off Office Area	Interior	MDF/AL	~	No	~	~	LR	Passage latch	~	D7	~	~	~	~	C6	
Meeting Room	Interior	Dbl MDF/AL	~	No	Acoustic	~	LR	Passage latch	~	D7	~	~	~	~	C6	
Toilets - Standard	Interior	SC/ST	~	Yes	~	~	PH-HP/PP	~	~	D7	~	~	~	~	C6	
Toilets - Disabled	Interior	SC/ST	~	Yes	~	~	PH-HP/PP	~	~	D7	~	~	~	~	C6	
Stationery Stores	Interior	MDF/AL	~	No	~	~	LR	Passage latch	~	D7	~	~	~	~	C6	
Records Stores	Interior	SC/ST	~	No	~	~	LP	Escape lock	MK	D7	K7	Sc6	S5	SL5	C6	
Plantroom	Interior	SC/ST	~/60/30	Yes	Smoke	~	LP	Escape lock	MK	D6	K6	Sc5	S5	SL5	C6	
Electrical/Comms Cupboards	Interior	SC/ST	~/60/30	Yes	Fire	~	LR	Closet lock	MK	D6	K6	Sc5	S5	SL5	C6	~/120/30 for main switchboard
Fire Stairs - Ext	Exterior	SC/ST	~/60/30	Yes	~	~	LP	Exit latch	~	D7	~	~	~	~	C7	No external lever
Fire Stairs - Int	Interior	SC/ST	~/60/30	Yes	~	~	LP	Passage latch	~	D6	~	~	~	~	C6	
Fire Hose Reels	Interior	SC/ST	~	No	~	~	LR	Closet latch	~	D6	~	~	~	~	C6	Or catch