

<b>0453P RONDO IN DOORS AND ACCESS PANELS</b>
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**Branded worksection**

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**Worksection abstract**

This branded worksection *Template* is applicable to the PANTHER® range of access panels and frames supplied by RONDO and conventional door frames of metal and timber with flush panel and joinery doors of timber and various timber and plastic products. This worksection only covers some key generic requirements as the range of available products, performance requirements and design choices is so wide.

**How to use this worksection**

Customise this worksection *Template* for each project. See A guide to NATSPEC worksections ([www.natspec.com.au](http://www.natspec.com.au)) for information on *Template* structure, word styles, and completing a worksection.

**Related material located elsewhere in NATSPEC**

If a listed worksection is not part of your subscription package and you wish to purchase it, contact NATSPEC.

Related material may be found in other worksections. See for example:

- *0451 Windows and glazed doors.*
- *0454 Overhead doors* for sectional and tilting overhead doors, roller shutters (including fire shutters), grilles and garage doors.
- *0581 Signage* for statutory and non-statutory door signage.

Related branded worksections include:

- *0522p RONDO in partitions – framed and lined.*
- *0531p RONDO in suspended ceilings – combined.*

**Material not provided by RONDO**

This branded worksection includes generic material which may not be provided by the Product Partner including:

- Joinery doors, fire-resistant doors, automatic sliding door assemblies and revolving doors.
- Security and bushfire screens and doors.

**Documenting this and related work**

You may document this and related work as follows:

- Doors and access panels need comprehensive detailing and scheduling beyond the scope of this worksection.
- In bushfire-prone areas, document bushfire protection requirements to AS 3959 (2018) and the NCC (2022). If documenting bushfire shutters, see AS 3959 (2018) clause 3.7 and *0457 External screens*.
- Document glazed joinery doors in *0451 Windows and glazed doors*.

The *Normal* style text of this worksection may refer to items as being documented elsewhere in the contract documentation. Make sure they are documented.

**Specifying ESD**

The following may be specified by retaining default text:

- Door seals to minimise air leakage when door is shut.
- Revolving doors to minimise heating and cooling losses from air movement.

The following may be specified by including additional text:

- Low VOC adhesives, stains and finishes.
- Re-use of salvaged doors.
- Recycled/reconstituted materials, e.g. paper honeycomb infill manufactured from post-consumer reclaimed cardboard.
- Frames and infills manufactured from offcuts, e.g. engineered, laminated or finger jointed members.
- Timber from a sustainable source.

Refer to NATSPEC TECHreport TR 01 on specifying ESD.

## 1 GENERAL

RONDO is a market leading manufacturer and supplier of wall and ceiling systems, and complementary accessories. RONDO is dedicated to providing the systems needed to realise visions effectively and in the most economical way possible, including systems where specific wind pressure, seismic design or acoustic design is to be accommodated. RONDO's commitment to providing market leading solutions, customer service and high quality products has led it to being behind the best buildings throughout the world.

### 1.1 RESPONSIBILITIES

#### General

Requirement: Provide PANTHER® access panels by RONDO and doors, frames, doorsets, security screen doors, smoke doorsets and fire-resisting doorsets, as documented.

*Documented* is defined in 0171 General requirements as meaning contained in the contract documents.

### 1.2 COMPANY CONTACTS

#### RONDO technical contacts

Website: [www.rondo.com.au/contact-us/](http://www.rondo.com.au/contact-us/).

### 1.3 CROSS REFERENCES

#### General

Requirement: Conform to the following:

- 0171 General requirements.

0171 General requirements contains umbrella requirements for all building and services worksections. List the worksections cross referenced by this worksection. 0171 General requirements references the 018 Common requirements subgroup of worksections. It is not necessary to repeat them here. However, you may also wish to direct the contractor to other worksections where there may be work that is closely associated with this work. NATSPEC uses generic worksection titles, whether or not there are branded equivalents. If you use a branded worksection, change the cross reference here.

- 0185 Timber products, finishes and treatment.
- 0455 Door hardware.

### 1.4 STANDARDS

#### General

Timber and composite doors: To AS 2688 (2017).

### 1.5 MANUFACTURER'S DOCUMENTS

#### Technical manuals

Resources: [www.rondo.com.au/resources](http://www.rondo.com.au/resources).

Products: [www.rondo.com.au/products/access-panels/panther-access-panels/](http://www.rondo.com.au/products/access-panels/panther-access-panels/).

Product Manuals: [www.rondo.com.au/resources/installation/product-manuals/](http://www.rondo.com.au/resources/installation/product-manuals/).

### 1.6 INTERPRETATION

#### Definitions

General: For the purposes of this worksection, the definitions given in AS 2688 (2017) and the following apply:

- Fire-resisting doorset: A doorset that retains its integrity, provides insulation and limits, if required, the transmittance of radiation in a fire.
- Smoke doorset: A doorset that restricts the passage of smoke.

Edit the **Definitions** subclause to suit the project or delete if not required. List alphabetically.

### 1.7 SUBMISSIONS

#### Operation and maintenance manuals

Requirement: Submit manual to **COMPLETION, Operation and maintenance manuals**.

#### Products and materials

Type tests: Submit results, as follows:

- Fire-resisting and smoke doorsets.
- Acoustic performance of doorsets.

Type tests are carried out off-site. However, submission of evidence of a successful type test may be called up here for requirements specified in SELECTIONS or PRODUCTS, when there are no SELECTIONS.

### Samples

General: Submit 2 samples as follows:

- Colour samples from prefinished production material, including anodised or powder coated extrusions and sheet, showing the limits of the range of variation, if any, for each component documented.
- Door manufacturer's standard hardware items.
- Finishes to prepared surfaces, including timber stains or veneers.
- Joints using proposed techniques.
- Proposed sections for frames, louvres and slats.

### Warranties

Requirement: Submit warranties to **COMPLETION, Warranties.**

## 1.8 INSPECTION

### Notice

Inspection: Give notice so that inspection may be made of the following:

- Door frames in place before building in to masonry.
- Door frames installed before fixing trim.

Amend to suit the project adding critical stage inspections required.

**Hold points**, if required, should be inserted here.

## 2 PRODUCTS

### 2.1 GENERAL

#### Product substitution

Other products: Conform to **SUBSTITUTIONS** in *0171 General requirements*.

**SUBSTITUTIONS** in *0171 General requirements* sets out the submissions required if the contractor proposes alternative products. Refer also to NATSPEC TECHnote GEN 006 for more information on proprietary specification.

### 2.2 RONDO ACCESS PANELS

#### PANTHER® range

The RONDO PANTHER® range of metal faced, sound rated and fire-rated access panel systems has been designed to meet the requirements of the NCC for domestic and commercial installations. They are designed for internal installation only in both stud and masonry walls and suspended ceiling systems as required.

Requirement: As documented in the **PANTHER® access panel schedule**.

Access panels:

- Metal faced access panel (MFAP).
- Sound rated access panel (SRAP).

Sound rated panels are made with a unique polymer frame and have an acoustic performance rating of  $R_w$  30. Standard sound rated panels can be face fixed for fast and safe installation. Doors are made from MR grade MDF finished in white primer and with a galvanized steel sheet lining.

- Fire-rated access panel (FRAP).

One or 2 hour fire-rated composite door panel with intumescent seal, tested to AS 1530.4 (2014).

- Aluminium manhole frame (AMF).

Designed for simple access to services through ceilings only.

Specialised architectural access panels:

- Tile access panel.

Made-to-order for use in a ceramic tiled or panelled wall where access to services is required.

- Wet area access panel.

Made from WetLine™ polymer board with a polymer frame that is washable and suitable for wet areas. This panel can also be supplied with Kilargo anti-microbial seal to the door frame for sterile areas.

- Security access panel.

Designed for applications that require a strong and secure installation. The inner and outer door skins are welded for added security and provided with a high-security deadlock.

- Perforated plasterboard access panel.

Customised panel with a steel or polymer frame. The door is made from perforated plasterboard and includes a set bead and a budget lock.

- Stainless steel panels.

For use in clean areas such as food preparation and kitchens. 1 mm thick stainless steel frame with a flanged edge detail coupled with a 16 mm MDF door clad in 1 mm stainless steel sheeting.

- Corrugated sheeting access panel.

Designed to be fixed to the cladding support structure and fit seamlessly into a soffit or wall.

- High performance access panel (HP51).

This panel has a weighted sound reduction index of  $R_w$  51 and an  $R_w + C_{tr}$  rating of 41 and is suitable for use in walls or vertical bulkheads where access to concealed services is required.

## 2.3 FRAMES

### Aluminium frames

Construction: Assembled from aluminium sections, including accessories such as buffers, pile strips, strike plates, fixing ties or brackets and cavity flashings, with provision for fixing documented hardware and seals.

Threshold: If the frame includes a threshold member, provide a self-draining section with slip-resistant surface.

Aluminium frames for sliding doors forming parts of standard aluminium window suites are documented in *0451 Windows and glazed doors*. Use this subclause for separate door frames not associated with aluminium windows, e.g. door frames in lightweight (non fire-resisting) partitions. In the latter case the door itself may be timber.

A wide range of sections are available. The required section profiles and dimensions are best shown on the drawings or nominated as a proprietary item.

### Steel frames

Construction: Continuously welded from metallic-coated steel sheet sections, including accessories such as buffers, strike plates, spreaders, mortar guards, switch boxes, fixing ties or brackets, and cavity flashing with provision for fixing documented hardware, seals and electronic security assemblies, and prefinished with a protective coating.

Base metal thickness (minimum):

- General: 1.1 mm.
- Fire-resisting doorsets: 1.5 mm.
- Security doorsets: 1.6 mm.

A wide range of steel door frames is available from heavy duty types, suitable for fire-resisting doorsets, to light gauge domestic frames. The required section profiles and dimensions are best shown on the drawings.

1.1 mm base metal thickness is suitable only for the lightest frame types, and for accessories such as switch boxes and glazing beads. It is however, a standard commercial thickness.

Metallic-coating class to AS 1397 (2021) interior: ZF100.

Metallic-coating class to AS 1397 (2021) exterior: [complete/delete]

The industry standard metallic coating is ZF100. This may not be suitable for all locations, e.g. external doors and doors subject to moisture or corrosive atmosphere, where a Z275 or Z450 coating or a stainless steel frame maybe more appropriate.

Finish: Grind the welds smooth, cold galvanize the welded joints and shop prime.

Hardware and accessories: Provide 4 mm backplates and lugs for fixing hardware including hinges and closers. Screw fix the hinges into tapped holes in the backplates.

### Timber frames

Hardwood: To AS 2796.1 (1999):

- Grade: Select.

Softwood: To AS 4785.1 (2002):

- Grade: Select.

Joints:

- Morticed head and through tenons.

- Trenched head:

. Bare faced tenons on jambs.

. Full let-in jambs.

If required, select a material and grade and detail fully.

Construction: Assembled from timber sections, with provision for fixing documented hardware including rebates for door seals, where documented.

## 2.4 DOORS

### General

Doors: Proprietary products manufactured for interior or exterior applications and for the finish required.

### Materials

Standards: Conform to the following:

- Decorative laminated sheets: To AS/NZS 2924.1 (1998).
- Wet process fibreboard (including hardboard): To AS/NZS 1859.4 (2018).
- Dry process fibreboard (including medium density fibreboard): To AS/NZS 1859.2 (2017).
- Particleboard: To AS 1859.1 (2017).
- Plywood and blockboard for interior use: To AS/NZS 2270 (2006).
- Plywood and blockboard for exterior use: To AS/NZS 2271 (2004).
- Seasoned cypress pine: To AS 1810 (1995).
- Timber – hardwood: To AS 2796.1 (1999).
- Timber – softwood: To AS 4785.1 (2002).

### Identification

Panel doors: Provide panels branded under the authority of a recognised certification scheme to *0185 Timber products, finishes and treatment*, as applicable to the product. Locate the brand on faces or edges that will be concealed in the works.

Nominate relevant classification schemes in *0185 Timber products, finishes and treatment*.

### Joinery doors

General: Provide joinery doors, as documented.

### Flush panel doors

General: Provide flush panel doors of balanced construction, as documented.

Medium density fibreboard doors: Single thickness of moisture resistant general purpose medium density fibreboard with the same surface finish to both sides, for internal use.

### Construction

General: To AS 2688 (2017).

AS 2688 (2017) gives detailed dimensional tolerances for door construction and installation.

Adhesives:

- Internal: To AS/NZS 2270 (2006).
- External: To AS/NZS 2271 (2004).

Door thickness:

- General: 35 mm.
- External doors and doors over 900 mm wide: 40 mm.

Omit thicknesses if noted in a door schedule.

Cut-outs: If openings are required in flush panel doors (e.g. for louvres or glazing), do not make cut-outs closer than the width of the stiles at the edges of the doors.

Edge strips: Minimum thickness 10 mm. Increase overall thickness to greater than 15 mm to accommodate the full depth of the rebate in rebated doors. Apply to the external edges of door after the facings are bonded to the door framing/core and finish flush with outside surface of the facings.

Edge strip location: [complete/delete]

Choose Fix to stiles or Fix all round.

Louvre grilles: Construct by inserting the louvre blades into a louvre frame, and fix the frame into the door.

Louvre grilles fitted to cut-outs in door leaves are often defined in the mechanical specification and listed on door schedules.

### Double doors

Square edged doors: Bevel as necessary to prevent binding between the leaves.

Rebated meeting stiles: If not double acting doors, provide rebated meeting stiles or fix equivalent metal T stop to one leaf where documented. Form rebates to suit standard rebated hardware.

## 2.5 DOORSETS

### Marking and labelling

Fire-resisting doorsets: To AS 1905.1 (2015), Section 6.

Doors and doorsets: To AS 2688 (2017), clause 2.5.

Fire-resistant doorsets are required to have metal tags attached to the door and the frame showing the FRL and other information required by AS 1905.1 (2015), Section 6.

### Acoustic performance

Doorsets: Rating to AS/NZS ISO 717.1 (2004), as documented.

Document the required rating in the **Doorsets performance schedule**.

### Automatic door assemblies

Standard: To AS 5007 (2007).

AS 5007 (2007) clause 3.1.2 lists a number of pre-construction mandatory design requirements. Consider keeping records of satisfactory consideration of these requirements.

Control systems: To *0455 Door hardware*.

### Cavity sliding doors

General: Proprietary product comprising steel and timber frame construction with rigid steel top, base and rear supporting members and incorporating the overhead door track, ball race type wheel carriages, guides, stops, split jamb linings and removable pelmet.

### Duct access panels

General: Proprietary products comprising metal-faced doors side-hung to steel door frames, including hardware and accessories such as hinges and lock and installation lugs.

Types other than metal are available. If fire-resisting is required, specify as a fire-resisting doorset.

### Fire-resisting doorsets

Standard: To AS 1905.1 (2015) and BCA (2022) Spec 12.

See also for requirements for radiation through glass.

BCA (2022) Spec 12 requires that a fire-resisting door will not fail by radiation through any glazed part but does not specify how this is assessed. See NATSPEC TECHnote DES 020 on fire behaviour in building materials and assemblies.

### Floor access panels

Frame: Weld from 50 x 50 x 6 mm angle, with two 40 mm cogged fixing lugs each side and shop prime.

Covers: 6.5 mm checker floorplate, on 40 x 40 x 6 mm angle welded frame with 32 x 6 mm diagonal stiffening flats. Cut, radius and grind off 100 x 25 mm lifting slots in each end of covers.

The member sizes and thickness are typical only. For large access panels or high floor loadings, the members may need to be heavier, and should be shown on the drawings.

### Revolving doorsets

Standard: To AS 5007 (2007).

AS 5007 (2007) clause 3.1.2 lists a number of pre-construction mandatory design requirements. Consider keeping records of satisfactory consideration of these requirements.

Control systems: To 0455 Door hardware.

### Security screen doorsets

Standard: To AS 5039 (2008).

### Smoke doorsets

Construction: Solid core doors not less than 35 mm thick.

Standard: To AS 6905 (2007) and BCA (2022) Spec 12. Tested to AS 1530.7 (2007).

Smoke doors must be constructed so that smoke will not pass from one side of the doorway to the other. Smoke seals are available in ambient, medium and hot smoke resistance. Check any fire requirements and nominate here or in schedules.

## 2.6 ANCILLARY MATERIALS

### Trim

General: Provide trim, shadow gaps and architraves, as documented.

Type: [complete/delete]

Document here or detail on drawings.

### Door seals

Acoustic applications: Tested to AS 1191 (2002) or EN ISO 10140-2 (2021) and rated to AS/NZS ISO 717.1 (2004).

Weather and energy saving seals: To AS 4420.1 (2016) Sections 5 and 6, and AS 2047 (2014).

### Extruded gaskets and seals

General: Provide seals, as documented.

Document in the **Door seal schedule**.

Materials: Non-cellular (solid) elastomeric seals as follows:

- Rubber products: Neoprene, ethylene propylene diene monomer (EPDM) or silicone rubber.

BS 4255-1 (1986) provides more specific product requirements for weather resistant rubber gaskets and seals.

- Flexible polyvinyl chloride (PVC): E type compounds, colourfastness grade B.

BS 2571 (1990) provides more specific requirements for PVC E type (extruded) products.

### Flashings

General: Corrosion-resistant, compatible with the other materials in the installation, and coated with a non-staining compound where necessary.

Standard: To AS/NZS 2904 (1995).

### Jointing materials

General: Compatible with each other and with the contact surfaces and non-staining to finished surfaces. Do not provide bituminous materials on absorbent surfaces.

### Nylon brush seals

General: Dense nylon bristles locked into holding strips and fixed in a groove in the edge of the door or in purpose-made anodised aluminium holders fixed to the door or frame to the manufacturer's recommendations.

### Pile weatherstrips

General: Polypropylene or equivalent pile and backing, low friction silicone treated, ultraviolet stabilised.

Standard: To AAMA 701/702 (2023).

AAMA 701/702 (2023) is a guide to selecting pile weatherstrip and weatherseals used in windows and doors. It defines requirements to restrict air and water infiltration. See BCA (2022) J5D5 and BCA (2022) H6D2(1)(b)(iii) for the sealing of windows and doors.

AS 3959 (2018) has some requirements for door and window seals in bushfire zones. Testing of seals to AS 1530.2 (1993) is required in some BAL zones.

### Weather bars

General: Provide corrosion-resistant weather bars or threshold plates under hinged external doors, located under the centres of closed doors or to manufacturer's recommendations.

Type: [complete/delete]

Document here or in the **Door seal schedule**, or refer to a detail. Weather bars and threshold plates are used at the junction between sill and door leaf or in place of a sill. Weather bars have been traditionally associated with purpose-made joinery.

Where sill profiles or proprietary profiles do not allow for the inclusion of a weather bar, document a proprietary seal or threshold section. As a secondary role, the weather bar can serve to protect the sill rebate from damage in high traffic areas.

When used as a single item without a sill and acting as a floor finish divider, document under the appropriate worksection (e.g. 0526 Terrazzo precast, 0612 Cementitious toppings, 0613 Terrazzo in situ or 0631 Ceramic tiling). The profile, material and method of fixing to the building fabric require clearance from the edges of the building fabric, e.g. concrete slabs. For embedded weather bars, document corrosion-resistant materials. The NCC covers thresholds in BCA (2022) D3D16.

### 3 EXECUTION

For positioning of changes of floor finishes at doorways, refer to the relevant floor finish worksection in the **FINISHES** group.

The installation methods described here are only some of the methods that may be required (if any). Do not rely on the specification for other than basic requirements and coordinate with the drawings and schedules.

#### 3.1 RONDO ACCESS PANELS

##### Installation

Requirement: Installation conforming to RONDO installation recommendations and standard construction drawings.

#### 3.2 FRAMES

##### General

Frames: Install the frames as follows:

- Plumb, level, straight and true.
- Fixed or anchored to the building structure.
- Isolated from any building loads, including loads caused by structural deflection or shortening.

##### Frame fixing

Brackets: Metallic-coated steel:

- Width: Minimum 25 mm.
- Thickness: Minimum 1.5 mm.

Depth of fixing for building into masonry:

- Brackets: Minimum 200 mm.
- Expansion anchors: Minimum 50 mm.
- Plugs: Minimum 50 mm.
- Rods: Minimum 60 mm.

Jamb fixing centres: Maximum 600 mm.

##### Joints

General: Make accurately fitted joints where fasteners, pins, screws, adhesives and pressure indentations are not visible on exposed surfaces.

##### Aluminium frames

Building into masonry: Screw galvanized steel brackets twice to jambs and build in.

Fixing to masonry openings: Use proprietary expansion anchors and screw twice through jambs at each fixing.

Fixing to stud frame openings: Screw once to studs at each fixing.

##### Steel frames

Building into masonry: Attach galvanized steel rods to jambs, build in and grout up.

Fixing to masonry openings: Build in hairpin anchors and install locking bars, or use proprietary expansion anchors and screw twice through jambs at each fixing.

Fixing to stud frame openings: Attach galvanized steel brackets to jambs and screw twice to studs at each fixing.

Solid grouting is advisable even in domestic construction. It is essential for fire doorsets.

##### Timber frames

Building into masonry: Screw galvanized steel brackets twice to jambs and build in.

Fixing to masonry openings: Use proprietary expansion anchors and screw twice through jambs at each fixing.



Fixing to stud frame openings: Back screw twice to jambs at each fixing.

Fixing to thresholds: Dowel external door frames to thresholds other than timber with 10 mm diameter brass dowels, 100 mm long.

Heads of fasteners: Conceal if possible, otherwise sink the head below the surface and fill the sinking flush with a material compatible with the surface finish.

### Finishing

Trim: Provide mouldings, architraves, reveal linings, and other internal trim using materials and finishes matching the door frames to make neat and clean junctions between the frame and the adjoining building surfaces.

### Seals

General: Provide the fixings, rebates, grooves, and clearances required for installation and operation of the seals. Allow seals unwound from coils to settle before use. Install proprietary seals to manufacturer's recommendations and adjust correctly.

### Weatherproofing

Flashings and weatherings: Install flashings, weather bars, threshold plates, drips, storm moulds, caulking and pointing to prevent water from penetrating the building between the door frame and the building structure under the prevailing service conditions, including normal structural movement of the building.

Document particular requirements for architraves, backmoulds, pelmets, etc., if different from the general requirement in the text clause, and if not shown on the drawings e.g. medium density fibreboard (MDF) 12 to 15 mm thick instead of solid timber.

## 3.3 DOORS

### Priming

General: Prime timber door leaves on top and bottom edges before installation.

### Tolerances

Installation: To AS 2688 (2017) Section 7.

## 3.4 DOORSETS

### General

Installation: To AS 2688 (2017) Section 7.

### Security screen doorsets

Standard: To AS 5040 (2003).

## 3.5 COMPLETION

### Operation

General: Make sure moving parts operate freely and smoothly, without binding or sticking, at correct tensions or operating forces and that they are lubricated where appropriate.

Opening force performance: To the NCC cited AS 1428.1 (2009).

The NCC cites AS 1428.1 (2001) and AS 1428.1 (2009). The current edition is AS 1428.1 (2021).

Opening force performance is not required in some applications. Delete if not required.

### Protection

Temporary coating: On or before the date for practical completion, or before joining up to other surfaces, remove all traces of temporary coatings used as a means of protection.

### Operation and maintenance manuals

Requirement: Prepare a manual that includes the manufacturer's published recommendations for service use.

Compliance with this clause targets the Operations and Maintenance requirement within the Minimum Expectation level of the Verification and Handover credit in Green Star Buildings (2021).

### Warranties

Requirement: Cover materials and workmanship in the terms of the warranty from the manufacturer.

- Form: Against failure of materials and execution under normal environment and use conditions.
- Period: As offered by the manufacturer.

## 4 SELECTIONS

**Schedules** are a tool to specify properties required for products or systems. If the principal permits documentation of the product or system by proprietary name, some of the properties may be unnecessary and can be deleted. Document the product or system's location or application here and/or on the drawings with a matching project code. Refer to NATSPEC TECHnote GEN 024 for guidance on using and editing schedules.

### 4.1 RONDO ACCESS PANELS

#### PANTHER® access panel schedule

	A	B	C
Product			
Panel material			
Surround finish			
Lock			
Latch			

The codes in the header row of the schedule designate each application or location of the item scheduled. Edit the codes to match those in other contract documents.

Custom sizes available, consult RONDO for options.

Metal faced access panel – Flanged edge: Select from:

- MFAP30FE: 300 mm x 300 mm.
- MFAP45FE: 450 mm x 450 mm.
- MFAP55FE: 550 mm x 550 mm.
- MFAP60FE: 600 mm x 600 mm.

Metal faced access panel - Set bead edge: Select from:

- MFAP30SB: 300 mm x 300 mm.
- MFAP45SB: 450 mm x 450 mm.
- MFAP55SB: 550 mm x 550 mm.
- MFAP60SB: 600 mm x 600 mm.

Sound rated access panel – Flanged edge: Select from:

- SRAP3030BLFE: 300 mm x 300 mm.
- SRAP3053BLFE: 530 mm x 530 mm.
- SRAP3045BLFE: 450 mm x 450 mm.

Sound rated access panel – Set bead edge: Select from:

- SRAP3030BLSB: 300 mm x 300 mm.
- SRAP3045BLSB: 450 mm x 450 mm.
- SRAP3053BLSB: 530 mm x 530 mm.

Fire rated access panel - One hour fire-rated flanged edge: Select from:

- FRAP1H30BLFE: 300 mm x 300 mm.
- FRAP1H45BLFE: 450 mm x 450 mm.
- FRAP1H53BLFE: 530 mm x 530 mm.
- FRAP1H60BLFE: 600 mm x 600 mm.

Fire rated access panel - One hour fire-rated set bead edge: Select from:

- FRAP1H30BLSB: 300 mm x 300 mm.
- FRAP1H45BLSB: 450 mm x 450 mm.
- FRAP1H53BLSB: 530 mm x 530 mm.
- FRAP1H60BLSB: 600 mm x 600 mm.

Fire rated access panel - 2 hour fire-rated screw fixed flanged edge: Select from:

- FRAP2H30SFFL: 300 mm x 300 mm.
- FRAP2H45SFFL: 450 mm x 450 mm.
- FRAP2H53SFFL: 530 mm x 530 mm.

- FRAP2H60SFFL: 600 mm x 600 mm.

Fire rated access panel - 2 hour fire-rated screw fixed set bead edge: Select from:

- FRAP2H30SFSB: 300 mm x 300 mm.
- FRAP2H45SFSB: 450 mm x 450 mm.
- FRAP2H53SFSB: 530 mm x 530 mm.
- FRAP2H60SFSB: 600 mm x 600 mm

Aluminium manhole frame: Select from:

- AMF3030: 300 mm x 300 mm.
- AMF4545: 450 mm x 450 mm.
- AMF5555: 550 mm x 550 mm.
- AMF6060: 600 mm x 600 mm.

Architectural access panel range: Custom sizes available, consult RONDO for options. Select from:

- Tile access panel.
- Wet area access panel
- Security access panel.
- Perforated plasterboard panel.
- Stainless steel access panel.
- Corrugated sheeting access panel.
- High performance access panel.

Architectural access panel material: Select from:

- Tile access panel: Ceramic tile or nominate the panel material.
- Perforated plasterboard panel: Consult RONDO for options.
- Corrugated sheeting panel: Nominate the material, e.g. Perforated custom orb.

Surround finish: Select from Flanged or Set bead edge.

Locks and latches: Select from:

- Budget lock: For MFAP, SRAP and 1 hour FRAP panels.
- Coin lock: For MFAP panel.
- Standard lock: For SRAP panel.
- CAM lock: For SRAP panel.
- Touch latch: For SRAP panel up to 450 mm x 450 mm.
- Magnetic catch: For 300 mm x 300 mm, 450 mm x 450 mm and 530 mm x 530 mm sized SRAP panels.
- For Architectural access panels, consult RONDO for options. Struts are available for large panels and security panels.

## 4.2 DOOR TYPES SCHEDULE

### Flush panel doors construction schedule

	A	B	C
Door type			
Door thickness (mm)			
Core material			
Facing material			
Face veneers: Matching arrangement			
Face veneers: Timber species or group			
Face veneers: Veneer quality			
Edge strip thickness (mm)			
Inset panels: Type			
Inset panels: Clear opening size (mm)			
Finish			
Floor clearance			

The codes in the header row of the schedule designate each application or location of the item scheduled. Edit the codes to match those in other contract documents.

Door type: e.g. Hollow core, Semi-solid core, Solid core or MDF.

Door thickness: Minimum thicknesses are documented in the worksection. Other thicknesses may be specified here if applicable. Most door lock furniture cannot be fitted to doors less than 35 mm thick.

Core material: Blockboard, particleboard or MDF (for solid core); Cellular paper or Wood curls (for cellular core).

Facing material: Hardboard, Laminate, Plywood or MDF.

Face veneers:

- Matching arrangement: (clear finishes only) e.g. Book, Centre, Diamond, Random or Slip.
- Timber species or group: e.g. Blackbutt, Radiata Pine, Red Cedar, Tasmanian Ash.
- Veneer quality: e.g. A for clear finishes, B for opaque.

Edge strip thickness (mm): State, if thicker than the minimum documented in the worksection.

Inset panels: Delete if there are no panels or openings in flush panel doors. Metal grilles may be documented in the mechanical worksections.

- Type: Glazed panel, Timber louvres, or Metal grille.
- Clear opening size (mm): Nominate the height and width of the opening. Size and position on the door should preferably be shown on the drawings.

Finish: e.g. a paint or clear finish system, or Melamine faced (state colour or pattern).

Floor clearance: For fire-resisting doorsets, AS 1905.1 (2015) clause 5.5.1 requires not less than 3 mm and not more than 10 mm.

#### Joinery doors construction schedule

	A	B	C
Door type			
Door thickness (mm)			
Adhesive			
Timber species or group			
Timber grade			
Finished sizes (mm): Top rails and stiles			
Finished sizes (mm): Intermediate rails			
Finished sizes (mm): Bottom rails			
Finished sizes (mm): Muntins			
Panels: Material			
Panels: Thickness (mm)			
Finish			
Floor clearance			

The codes in the header row of the schedule designate each application or location of the item scheduled. Edit the codes to match those in other contract documents.

Door type: e.g. Framed and glazed, Framed and panelled, Framed, double sheeted, Louvred, Insect screen door. Delete any headings that do not apply to the joinery door types in the project.

Door thickness (mm): Minimum thicknesses are specified in the worksection. Other thicknesses may be specified here if applicable. Most door lock furniture cannot be fitted to doors less than 35 mm thick. Large glazed doors should be 45 mm thick or more.

Adhesive: Internal or external.

Timber species or group: e.g. Blackbutt, Radiata Pine, Red Cedar, Tasmanian Ash.

Timber grade:

- Hardwood: To AS 2796.1 (1999).
- Softwood: To AS 4785.1 (2002).

Finished sizes (mm): Insert preferred sizes here, or show member arrangement and sizes on the drawings.

Panels:

- Material: Plywood with veneer quality, or Hardboard or Particleboard, or Insect screen mesh (for insect screen doors) - state mesh type (bronze, aluminium or fibreglass) and fibreglass colour (black or grey).
- Thickness (mm): Nominate the panel thickness.

Finish: e.g. a paint or clear finish system.

Floor clearance: For fire-resisting doorsets, AS 1905.1 (2015) clause 2.5 requires not less than 3 mm and not more than 10 mm.

#### Door seal schedule

	A	B	C
Product			
Function			
Carrier material and finish			
Seal insert type and material			
Complementary seal			

The codes in the header row of the schedule designate each application or location of the item scheduled. Edit the codes to match those in other contract documents.

Door seals: Nominate type here, or cross reference to *0455 Door hardware*.

Product: Full identification will allow deletion of the following generic descriptions.

Function: Select from the following:

- Acoustic seals.
- Fire and smoke seals.
- Cold draught, dust and ember seals.
- Light seals.
- Insect and vermin seals.
- Weatherseals.

Carrier material and finish: e.g. Brass, Anodised aluminium.

Seal insert type and material: e.g. Polypropylene pile.

Complementary seal: Describe that part of a sealing system that is fixed to the frame and threshold.

### 4.3 DOORSETS SCHEDULE

#### Doorsets performance schedule

	A	B	C
Fire-resistance level (FRL)			
Airborne sound insulation			

The codes in the header row of the schedule designate each application or location of the item scheduled. Edit the codes to match those in other contract documents.

Fire resistance level (FRL): If required, nominate the FRL to AS 1530.4 (2014). See NATSPEC TECHnote DES 020 on fire behaviour of building materials and assemblies.

Airborne sound insulation: State the required rating to AS/NZS ISO 717.1 (2004) for either the weighted sound reduction index ( $R_w$ ) or weighted sound reduction index with spectrum adaptation ( $R_w + C_{tr}$ ). This rating is for a building system e.g. partition wall, of which the building element is only one component. It may be better to provide the rating in the appropriate system schedule. It is advisable to obtain the advice of an acoustic consultant on the selection of an  $R_w$  or  $R_w + C_{tr}$  rating for airborne sound transmission reduction. Refer to NATSPEC TECHnote DES 032 for information.

#### Fire-resisting doorsets construction schedule

	A	B	C
Automatic closure: Action			
Edge strip thickness (mm)			
Face veneers: Matching arrangement			
Face veneers: Timber species or group			
Face veneers: Veneer quality			
Fire-resistance level (FRL)			

	A	B	C
Glazing			
Hardware: Item			
Hardware: Material			
Hardware: Finish			
Door seals			

The codes in the header row of the schedule designate each application or location of the item scheduled. Edit the codes to match those in other contract documents.

Specification by proprietary item (manufacturer's standard door suite), will automatically cover most of the prescriptive items in this schedule.

Bushfire protection in BAL-FZ: If bushfire shutters are not used, document doors to AS 3959 (2018) clause 9.5.

Automatic closure: As defined in AS 1905.1 (2015): Required, or delete.

- Action: Hinged, Double acting or Sliding (may be shown on the drawings).

Edge strip thickness (mm): State, if thicker than the minimum documented in the worksection.

Face veneers:

- Matching arrangement: (clear finishes only) e.g. Book, Centre, Diamond, Random or Slip.
- Timber species or group: e.g. Blackbutt, Radiata Pine, Red Cedar, Tasmanian Ash.
- Veneer quality: e.g. A for clear finish, B for opaque.

Fire-resistance level (FRL): Nominate the FRL to AS 1530.4 (2014). See NATSPEC TECHnote DES 020 on fire behaviour of building materials and assemblies.

Glazing: A non-insulated Vision panel up to 65,000 mm<sup>2</sup> clear opening area is permitted by AS 1905.1 (2015), clause 2.5, but regulations may override.

Hardware: e.g. Locksets, latchsets, hinges, floor springs and pivots, closers, handles, flush pulls. The hardware is an integral part of the certified installation (see AS 1905.1 (2015) clause 5.6). Consult the manufacturers. The description may be cross referenced to items specified in detail in *0451 Windows and glazed doors* and *0455 Door hardware*. List non-standard hardware here.

Door seals: Nominate type here or cross reference to *0455 Door hardware*. Types may include intumescent, hot smoke or combined functions.

#### Security screen doors construction schedule

	A	B	C
Type			
Material			
Finish			
Hinges: Material			
Hinges: Fixing			
Lock			

The codes in the header row of the schedule designate each application or location of the item scheduled. Edit the codes to match those in other contract documents.

Specification by proprietary item (manufacturer's standard door suite), will automatically cover most of the descriptive items in this schedule.

Type: Hinged to Type I or II or III. Sliding to Type I, II or III. AS 5039 (2008) clause 5.2 describes the following three types.

- Type I prevents an arm from passing through.
- Type II allows an arm but prevents bodily entry.
- Type III prevents insects passing through.

Material: Steel or aluminium.

Finish: See AS 5039 (2008) clause 6.2 for corrosion protection finishes.

Hinges:

- Material: e.g. Aluminium.
- Fixing: Rivets or fastening devices. See AS 5039 (2008) clause 6.7 and AS 5039 (2008) clause 6.8.

Lock: See AS 5039 (2008) clause 6.5. If the manufacturer's standard lock and hardware are not acceptable, nominate non-standard hardware using the titles of items specified in detail in *0455 Door hardware*, or by the designations (trade names, etc.) of proprietary products.

**Automatic doorset schedule**

	A	B	C
Pedestrian traffic			
Door configuration			
Drive type			
Drive location			
Motion sensor control device			
Proprietary door suite			
Glazing			
Safety markings			
Aluminium frame finish			
Powder coating: Service condition category			
Powder coating: Coating performance			
Powder coating: Coating type			
Powder coating: Polyester coating grade			
Powder coating: Product			
Powder coating: Gloss level			
Colour			
Ultimate limit state (ULS) wind pressure (Pa)			
Lock type			
Door seals			

The codes in the header row of the schedule designate each application or location of the item scheduled. Edit the codes to match those in other contract documents.

Pedestrian traffic: e.g. Light, Medium or Heavy.

Door configuration: e.g. Single slide, Bi-part slide or Revolving.

Drive type: e.g. Electromechanical, or specify a proprietary product.

Drive location: e.g. Overhead-concealed or Surface-applied.

Motion sensor control device: e.g. Infra-red, or specify a proprietary product.

Proprietary door suite: Nominate proprietary window and glazed door suite if applicable.

Glazing: Nominate here or refer to *0461 Glazing*.

Safety markings: Describe line or patterns to AS 1288 (2021) clause 5.19 on making glass visible. AS 1428.1 (2009) clause 6.6 requires a solid and non-transparent contrasting line to the full width of the glazing where a building is required to be accessible. The NCC cites AS 1428.1 (2001) and AS 1428.1 (2009). The current edition is AS 1428.1 (2021).

Aluminium frame finish: e.g. Powder coat or anodised.

Powder coating: Service condition category: AS 3715 (2002) clause 1.4 describes service condition categories for powder coated aluminium architectural applications based on the severity of the environment. Select from the following atmospheric environments:

- Category 3 – Exterior mild to moderate.
- Category 4 – Tropical.
- Category 5 – Exterior severe.

Categories 1 and 2, applicable to interior environments, are not included in this standard.

See NATSPEC TECHnote DES 010 for information on atmospheric corrosivity categories.

Powder coating: Coating performance: The AAMA standards represent the various warranty performances available and should be selected appropriate to the class of the project and the application. Select from:

- To AAMA 2603 (2022) or AS 3715 (2002). Applicable to internal environments of all classes of the NCC or external environments of NCC Class 1 and 10a buildings.
- To AAMA 2604 (2022). Applicable to all NCC building classes.
- To AAMA 2605 (2022). Applicable to all NCC building classes.

Powder coating: Coating type: Thermoset polyester powder coating or Thermoset fluoropolymer powder coating.

Powder coating: Polyester coating grade: General or Commercial. Delete if using fluoropolymer powder coating.

Powder coating: Product: Contact the manufacturer's data sheets for a complete product description.

Powder coating: Gloss level: e.g. Texture, Matt, Satin or Gloss. Not all gloss levels are available across the colour ranges.

Colour: Consult the manufacturer's colour charts.

Ultimate limit state wind pressure: Nominate the design wind pressures for the project to AS/NZS 1170.2 (2021) (for residential and commercial buildings) or AS 4055 (2021) (for Class 1 and 10a buildings).

Lock type: e.g. Entrance lock. Refer to *0455 Door hardware*.

Door seals: Nominate type here, or cross reference to *0455 Door hardware*.

#### REFERENCED DOCUMENTS

The following documents are incorporated into this worksection by reference:

AS ISO 717		Acoustics - Rating of sound insulation in buildings and of building elements
AS/NZS ISO 717.1	2004	Airborne sound insulation
AS 1191	2002	Acoustics - Method for laboratory measurement of airborne sound transmission insulation of building elements
AS 1397	2021	Continuous hot-dip metallic coated steel sheet and strip - Coatings of zinc and zinc alloyed with aluminium and magnesium
AS 1428		Design for access and mobility
AS 1428.1	2009	General requirements for access - New building work
AS 1530		Methods for fire tests on building materials, components and structures
AS 1530.7	2007	Smoke control assemblies - Ambient and medium temperature leakage test procedure
AS 1810	1995	Timber - Seasoned cypress pine - Milled products
AS/NZS 1859		Reconstituted wood-based panels - Specifications
AS 1859.1	2017	Particleboard
AS/NZS 1859.2	2017	Dry process fibreboard
AS/NZS 1859.4	2018	Wet process fibreboard
AS 1905		Components for the protection of openings in fire-resistant walls
AS 1905.1	2015	Fire-resistant doorsets
AS 2047	2014	Windows and external glazed doors in buildings
AS/NZS 2270	2006	Plywood and blockboard for interior use
AS/NZS 2271	2004	Plywood and blockboard for exterior use
AS 2688	2017	Timber and composite doors
AS 2796		Timber - Hardwood - Sawn and milled products
AS 2796.1	1999	Product specification
AS/NZS 2904	1995	Damp-proof courses and flashings
AS/NZS 2924		High pressure decorative laminates - Sheets made from thermosetting resins
AS/NZS 2924.1	1998	Classification and specifications
AS 4420		Windows, external glazed, timber and composite doors - Methods of test
AS 4420.1	2016	Test sequence, sampling and test methods
AS 4785		Timber - Softwood - Sawn and milled products
AS 4785.1	2002	Product specification
AS 5007	2007	Powered doors for pedestrian access and egress
AS 5039	2008	Security screen doors and security window grilles
AS 5040	2003	Installation of security screen doors and window grilles
AS 6905	2007	Smoke doors
BCA Spec 12	2022	Fire resistance - Fire doors, smoke doors, fire windows and shutters
AAMA 701/702	2023	Performance specification for pile weatherstrips (AAMA 701) and polymer weatherseals (AAMA 702)
EN ISO 10140		Acoustics - Laboratory measurement of sound insulation of building elements
EN ISO 10140-2	2021	Measurement of airborne sound insulation

The following documents are mentioned only in the **Guidance text**:

AS/NZS 1170		Structural design actions
AS/NZS 1170.2	2021	Wind actions
AS 1288	2021	Glass in buildings - Selection and installation
AS 1428		Design for access and mobility
AS 1428.1	2001	General requirements for access - New building work
AS 1428.1	2021	General requirements for access - New building work
AS 1530		Methods for fire tests on building materials, components and structures
AS 1530.2	1993	Test for flammability of materials
AS 1530.4	2014	Fire-resistance tests for elements of construction
AS 3715	2002	Metal finishing - Thermoset powder coating for architectural applications of aluminium and aluminium alloys
AS 3959	2018	Construction of buildings in bushfire-prone areas



AS 4055	2021	Wind loads for housing
BCA D3D16	2022	Access and egress - Construction of exits - Thresholds
BCA H6D2	2022	Class 1 and 10 buildings - Energy efficiency - Application of Part H6
BCA J5D5	2022	Energy efficiency - Building sealing - Windows and doors
NCC	2022	National Construction Code
GBCA Buildings	2021	Green Star Buildings
NATSPEC DES 010		Atmospheric corrosivity categories for ferrous products
NATSPEC DES 020		Fire behaviour of building materials and assemblies
NATSPEC DES 032		Airborne sound insulation
NATSPEC GEN 006		Product specifying and substitution
NATSPEC GEN 024		Using NATSPEC selections schedules
NATSPEC TR 01		Specifying ESD
BS 2571	1990	Specification for general-purpose flexible PVC compounds for moulding and extrusion
BS 4255		Rubber used in preformed gaskets for weather exclusion from buildings
BS 4255-1	1986	Specification for non-cellular gaskets
AAMA 2603	2022	Voluntary specification, performance requirements and test procedures for pigmented organic coatings on aluminum extrusions and panels (with coil coating appendix)
AAMA 2604	2022	Voluntary specification, performance requirements and test procedures for high performance organic coatings on aluminum extrusions and panels (with coil coating appendix)
AAMA 2605	2022	Voluntary specification, performance requirements and test procedures for superior performing organic coatings on aluminum extrusions and panels (with coil coating appendix)