

0453P RONDO IN DOORS AND ACCESS PANELS

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 door leaves 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.

Guidance text

All text within these boxes is provided as guidance for developing this worksection and should not form part of the final specification. This *Guidance* text may be hidden or deleted from the document using the NATSPEC Toolbar or the hidden text *Hide* and *Delete* functions of your word processing system. For additional information visit FAQs at www.natspec.com.au.

Optional style text

Text in this font (blue with a grey background) covers items specified less frequently. It is provided for incorporation into *Normal* style text where it is applicable to a project.

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* for framed glazed doors forming part of window assemblies.
- *0455 Door hardware* for manufacturers' non-standard hardware.
- *0454 Overhead doors* for sectional and tilting overhead doors, roller shutters (including fire shutters), grilles and garage doors.
- *0522p RONDO in partitions - framed and lined.*
- *0531p RONDO in suspended ceilings – combined.*

Cross references

Worksections that cross reference this worksection are:

- *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.
- Bushfire protection: Depending on the level of construction to AS 3959 the doors should satisfy the construction requirements of AS 3959 and the BCA. See NATSPEC TECHnote DES 018 for information on bushfire protection.

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 off-cuts, e.g. engineered, laminated or finger jointed members.
- Timber from a sustainable source.

Refer to the 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 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/contactus

Resources: www.rondo.com.au/resources

Products: www.rondo.com.au/products/access-panels

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.

- 0455 Door hardware.

1.4 MANUFACTURER'S DOCUMENTS

Technical manuals

Website: www.rondo.com.au/resources/product-manuals

1.5 INTERPRETATION

Definitions

General: For the purposes of this worksection the following definitions apply:

- Balanced construction: Flush door construction where the facings on one side of the core are nominally equal in thickness, grain direction, properties and arrangement to those on the other side of the core, such that uniformly distributed changes in moisture content will not cause warpage.
- Cellular core door: Timber hollow core doors with cellulose mesh grid or honeycomb core encased by timber rails and stiles.
- Door frame: Includes jamb linings.
- Doorset: An assembly comprising a door or doors and supporting frame, guides and tracks including the hardware and accessories necessary for operation.
 - Fire-resisting doorset: A doorset which retains its integrity, provides insulation and limits, if required, the transmittance of radiation in a fire.
 - Smoke-doorset: A doorset which restricts the passage of smoke.

- Flush door: A door leaf with two plane faces which entirely cover and conceal its structure. It includes doors with intermediate rail, cellular, blockboard, medium density fibreboard (MDF) and particleboard cores.
 - . Solid core door: A flush door with a solid core continuous between stiles and rails or edge strips and fully bonded to the faces.
 - . Hollow core door: Flush door leaf with air spaces between the two outer facings, constructed with either a cellular core or skeleton core.
- Joinery door: A door leaf with either stiles and rails, or stiles, rails and muntins, framed together. A joinery door may also incorporate glazing bars.
 - . Louvred door: A joinery door with framed openings filled in with louvre blades.
 - . Panelled door: A joinery door with framed openings filled in with panels including glass.

Glazed joinery doors are specified in *0451 Windows and glazed doors*.

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

1.6 SUBMISSIONS

Operation and maintenance manuals

Recommendations: Submit the manufacturer's published recommendations for service use.

Products and materials

0171 General requirements covers tests in **Definitions** and calls for an inspection and testing plan under **SUBMISSIONS, Tests**.

Type tests: Submit results, as follows:

- Fire-resisting and smoke doorsets: To AS 1905.1 and BCA Spec C3.4.

BCA Spec C3.4 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.

- Weighted sound reduction index (R_w): To AS/NZS ISO 717.1.

The BCA cites ISO 717-1:1996 and AS/NZS 1276.1 for testing of construction required to have a certain R_w rating.

Samples

General: Submit 2 samples as follows:

- Colour range from prefinished production material (e.g. anodised or organic coated extrusions and sheet). Following the colour selection, submit 5 sets of samples showing the colour range.
- Door manufacturer's standard hardware items.
- Finishes to prepared surfaces.
- Joints using proposed techniques.
- Proposed sections for frames, louvres and slats.

Warranty

Requirement: Submit RONDO warranty.

1.7 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.

Hold points, if required, should be inserted here.

2 PRODUCTS

2.1 GENERAL

Product substitution

Other products: Conform to PRODUCTS, **GENERAL, Substitutions** in *0171 General requirements*.

The *0171 General requirements* worksection clause 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.

- 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

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

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

Aluminium frames for sliding doors forming parts of standard aluminium window suites are documented in . Use this clause 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 is available. The required section profiles and dimensions are best shown on the drawings or nominated as a proprietary item.

Steel frames

General: 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 and electronic security assemblies, and prefinished with a protective coating.

Base metal thickness:

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

A wide range of steel door frames are 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 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 interior: ZF100.

Metallic-coating class to AS 1397 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:

- Grade: Select.

Softwood: To AS 4785.1:

- 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.

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.
- Wet processed fibreboard (including hardboard): To AS/NZS 1859.4.
- Dry processed fibreboard (including medium density fibreboard): To AS/NZS 1859.2.
- Particleboard: To AS/NZS 1859.1.
- Plywood and blockboard for interior use: To AS/NZS 2270.
- Plywood and blockboard for exterior use: To AS/NZS 2271.
- Seasoned cypress pine: To AS 1810.
- Timber – hardwood: To AS 2796.1.
- Timber – softwood: To AS 4785.1.

Certification

Panel doors: Provide panels branded under the authority of a recognised certification program applicable to the product. Locate the brand on faces or edges which will be concealed in the works.

Joinery doors

General: Provide joinery doors, as documented.

Flush doors

General: Provide flush doors of balanced construction.

Cellular core and intermediate rail core flush doors:

- Provide a subframe of 25 mm minimum width timber around openings for louvres and glazing.
- Provide additional material to take hardware, fastenings and grooves.

Solid core: Solid flush doors as follows:

- Flush door with blockboard: Core plate of timber strips laid edge to edge, fully bonded to each other and to facings each side of no less than two sheets of timber veneer.
- Flush doors with particleboard: Core plate of particleboard fully bonded to facings each side of no less than two sheets of timber veneer.

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.

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

Construction

Adhesives:

- Internal: To AS/NZS 2270.
- External: To AS/NZS 2271.

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 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. Form rebates to suit standard rebated hardware.

Tolerance

Squareness: The difference between the lengths of diagonals of a door: Maximum 3 mm.

Twist: The difference between perpendicular measurements taken from diagonal corners: Maximum 3 mm.

Door panel nominal size (mm):

- Height: ± 2 .
- Width: + 2, - 0.

2.5 DOORSETS**Automatic sliding door assemblies**

Standard: To AS 5007.

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

Arrangement: As documented in the **Automatic door schedule**.

Show on the drawings the arrangement of the sliding door and frame and details of the linings and trim. Add additional text to suit the installation required.

Control systems: Refer 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 and BCA Spec C3.4.

See also for requirements for radiation through glass.

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 the members may need to be heavier, and should be shown on the drawings.

Revolving doorsets

Standard: To AS 5007.

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

Arrangement: As documented in the **Automatic door schedule**.

Control systems: Refer to *0455 Door hardware*.

Security screen doorsets

Standard: To AS 5039.

Arrangement: As documented in the **Security screen doors construction schedule**.

2.6 ANCILLARY MATERIALS

Trims

Timber: Solid timber at least 19 mm thick, mitred at corners.

Extruded gaskets and seals

General: As documented in the **Door seal schedule**.

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

- Flexible polyvinyl chloride (PVC): To BS 2571, 100% solids with high consistency, ultraviolet stabilised.
- Rubber products (neoprene, ethylene propylene diene monomer (EPDM) or silicone rubber): To BS 4255-1.

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.

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 galvanized steel strips and fixed in a groove in the edge of the door or in purpose-made anodised aluminium holders fixed to the door with double sided PVC foam tape.

Pile weather strips

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

Standard: To AAMA 701/702.

AAMA 701/702 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 3.12.3 and BCA J3.4 for the sealing of windows and doors.

Weather bars

General: Provide a weather bar under hinged external doors, locate under the centres of closed doors.

Type: [complete/delete]

Document here or refer to a detail. Weather bars are used either as a barrier between sill and building fabric (or sub sill), 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, timber agencies (e.g. Timber & Building Manufacturers Association, NSW) or proprietary profiles do not allow for the inclusion of a weather bar; specify 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, specify under the appropriate worksection (e.g. 0526 Terrazzo precast, 0612 Cementitious toppings, 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 BCA covers thresholds at BCA D2.15.

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: Build in seasoned timber plugs to masonry joints or 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: Build in seasoned timber plugs to masonry joints or 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.

Weatherproofing

Flashings and weatherings: Install flashings, weather bars, 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 - 15 mm thick instead of solid timber.

3.3 DOORS

Priming

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

3.4 DOORSETS

Security screen doorsets

Standard: To AS 5040.

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.

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.

Warranties

Requirement: Provide manufacturer's warranties as follows:

Product: [complete/delete]

Period: [complete/delete]

10 years: RONDO PANTHER® range.

4 SELECTIONS

Schedules are a way of documenting a selection of proprietary or generic products or systems by their properties. Indicate their locations here and/or on the drawings. Refer to NATSPEC TECHnote GEN 024 for guidance on using and editing schedules.

4.1 RONDO ACCESS PANELS

PANTHER® access panel schedule

Property	A	B	C
Product			
Panel material			
Surround finish			
Lock			
Latch			

A, B, C: These designate each instance or type or location of the item scheduled. Edit to align with the project's codes or tags. Edit codes in the **Schedule** to match those on drawings. 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 doors construction schedule

Property	A	B	C
Door type			
Thickness (mm)			
Core material			
Facing material			
Face veneers: Timber species or group			
Face veneers: Veneer quality			
Face veneers: Matching arrangement			
Edge strip thickness (mm)			
Panel: Type			
Panel: Clear opening size			

Property	A	B	C
(mm)			
Finish			
Floor clearance			

A, B, C: These designate each instance or type or location of the item scheduled. Edit to align with the project's codes or tags.

Edit codes in the **Schedule** to match those on drawings.

Door type: e.g. Solid core, MDF, Cellular core, Intermediate rail core.

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: Hardboard, Laminate, Plywood or MDF.

Face veneers:

- Veneer quality: e.g. A for clear finishes, B for opaque.
- Matching arrangement: (clear finishes only) e.g. Book, Centre, Diamond, Random or Slip.

Edge strips:

- Thickness (mm): State, if thicker than the minimum documented in the worksection.

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

- Type: Timber louvres, Glazed or Metal grille.
- Clear opening size (h x w) (mm): 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 clause 5.5.1 requires not less than 3 mm and not more than 10 mm.

Joinery doors construction schedule

Property	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			

A, B, C: These designate each instance or type or location of the item scheduled. Edit to align with the project's codes or tags.

Edit codes in the **Schedule** to match those on drawings.

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

Adhesive: Internal or external.

Grade:

- Hardwood: To AS 2796.1.
- Softwood: To AS 4785.1.

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

- Door thickness: 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.

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).

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

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

Door seal schedule

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

A, B, C: These designate each instance or type or location of the item scheduled. Edit to align with the project's codes or tags. Edit codes in the **Schedule** to match those on drawings.

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

Refer to subgroup *019 Sundry installations* for proprietary seals.

Function: Select:

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

Carrier: e.g. Brass, Anodised aluminium.

Seal insert: 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

Property	A	B	C
Fire-resistance level (FRL)			
Weighted sound reduction index (R _w)			

Refer to NATSPEC TECHnote DES 032 for information on airborne sound insulation.

Security screen doors construction schedule

Property	A	B	C
Type			

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

A, B, C: These designate each instance or type or location of the item scheduled. Edit to align with the project's codes or tags. Edit codes in the **Schedule** to match those on drawings.

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 clause 5.2 describes the 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 clause 6.2 for corrosion protection finishes.

Hinges:

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

Lock: See AS 5039 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.

Fire-resisting doorsets construction schedule

Property	A	B	C
Automatic closure: Action			
Edge strips thickness			
Face veneers: Veneer quality			
Face veneers: Timber species or group			
Face veneers: Matching arrangement			
Fire resistance level			
Glazing			
Hardware: Item			
Hardware: Material			
Hardware: Finish			

See NATSPEC TECHnote DES 018 on bushfire protection.

A, B, C: These designate each instance or type or location of the item scheduled. Edit to align with the project's codes or tags.

Edit codes in the **Schedule** to match those on drawings.

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

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

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

Face veneers:

- Veneer quality: e.g. A for clear finish, B for opaque.
- Matching arrangement: (clear finishes only) e.g. Book, Centre, Diamond, Random or Slip.

Fire-resistance level: State required level to AS 1530.4 (in minutes structural adequacy/integrity/insulation).

Glazing: A non-insulated Vision panel up to 65,000 mm² clear opening area is permitted by AS 1905.1, 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 clause 5.6). Consult the manufacturers. The description may be cross-referred to items specified in detail in *0451 Windows and glazed doors* and *0455 Door hardware*. List non-standard hardware here.

Automatic door schedule

Property	A	B	C
Product			
Action			
Glazing			
Frame type			

A, B, C: These designate each instance or type or location of the item scheduled. Edit to align with the project's codes or tags.

Edit codes in the **Schedule** to match those on drawings.

Action: e.g. Single sliding panel, Bi-parting sliding panels, Revolving.

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

Frame type: e.g. nominate an aluminium suite and finish, or Frameless.

Refer to *0455 Door hardware* for door control.

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 1397	2011	Continuous hot-dip metallic coated steel sheet and strip - Coatings of zinc and zinc alloyed with aluminium and magnesium
AS 1810	1995	Timber - Seasoned cypress pine - Milled products
AS/NZS 1859		Reconstituted wood-based panels - Specifications
AS/NZS 1859.1	2004	Particleboard
AS/NZS 1859.2	2004	Dry-processed fibreboard
AS/NZS 1859.4	2004	Wet-processed fibreboard
AS 1905		Components for the protection of openings in fire-resistant walls
AS 1905.1	2015	Fire-resistant doorsets
AS/NZS 2270	2006	Plywood and blockboard for interior use
AS/NZS 2271	2004	Plywood and blockboard for exterior use
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 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
BCA Spec C3.4	2016	Fire resistance - Fire doors, smoke doors, fire windows and shutters
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 701/702	2011	Voluntary specification for pile weatherstripping and able fenestration weatherseals

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

AS/NZS 1276		Acoustics - Rating of sound insulation in buildings and of building element
AS/NZS 1276.1	1999	Airborne sound insulation
AS 1530		Methods for fire tests on building materials, components and structures
AS 1530.4	2014	Fire-resistance test of elements of construction
AS 3959	2009	Construction of buildings in bushfire prone areas
BCA 3.12.3	2016	Acceptable construction - Energy efficiency - Building sealing
BCA D2.15	2016	Access and egress- Construction of exits - Thresholds
BCA J3.4	2016	Energy efficiency - Building sealing - Windows and doors
NATSPEC DES 018	2008	Bushfire protection
NATSPEC DES 020	2011	Fire behaviour of building materials and assemblies

NATSPEC DES 032	2014	Airborne sound insulation
NATSPEC GEN 006	2007	Product specifying and substitution
NATSPEC GEN 024	2015	Using NATSPEC selections schedules
NATSPEC TR 01	2016	Specifying ESD
ISO 717		Acoustics - Rating of sound insulation in buildings and of building elements
ISO 717-1	1996	Airborne sound insulation