### 0453P CS CAVITY SLIDERS IN DOORS AND ACCESS PANELS

#### **Branded worksection**

This branded worksection *Template* has been developed by NATSPEC in conjunction with **CS Cavity Sliders Pty Ltd** (the Product Partner) and may be used whilst the Product Partner is licensed to distribute it. The copyright remains with NATSPEC. As with all NATSPEC worksections, it is the responsibility of the user to make sure it is completed appropriately for the project. The user should also review its applicability for local conditions and regulations. Check www.natspec.com.au for the latest updated version.

#### **Worksection abstract**

This branded worksection *Template* is applicable to cavity sliding doors supplied by CS Cavity Sliders 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) 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.

#### Material not provided by CS Cavity Sliders

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

- Joinery doors, duct access 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.

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

CS Cavity Sliders are the cavity slider experts, manufacturing high quality cavity sliders and related products for the residential, architectural, commercial and health care markets.

Established in 1986, their mission is to engineer and produce the best cavity sliding door solutions. The extensive range also includes sliding door track systems, wardrobe sliders, aluminium door leaves, sliding door hardware and automated cavity sliders.

#### 1.1 RESPONSIBILITIES

#### General

Requirement: Provide CS Cavity Sliders sliding pockets, doors and associated hardware, as documented.

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

### 1.2 COMPANY CONTACTS

### **CS Cavity Sliders technical contacts**

Website: www.cavitysliders.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**

Products: www.cavitysliders.com.au/products.

Specifier's guide: www.cavitysliders.com.au/architects.

# 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.

### **Product identification**

General: Marked to show the following:

- Manufacturer's identification.
- Product brand name.
- Product type.
- Quantity.
- Product reference code and batch number.
- Date of manufacture.
- Material composition and characteristics such as volatility, flash point, light fastness, colour and pattern.

Edit the list to suit the project or delete if not required.

### 2.2 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.

# 2.3 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 cutouts 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

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.

# 2.4 CS CAVITY SLIDERS PRODUCTS

### **CavitySliders™**

General: Proprietary product comprising architectural grade extruded aluminium top track, back stud, bottom plate, and vertical split jambs and incorporating 2-wheel or 4-wheel fully enclosed carriages with fully ground bearings, guides, stops and timber jamb linings including closing jamb.

Delete cavity sliding doors not applicable to the project.

CS TimberFormed™: Extruded aluminium frame and track with timber jambs.

CS FramelessGlass™: Extruded aluminium frame and track with timber jambs and frameless toughened safety glass door.

CS SpaceMaker™: Extruded aluminium frame and track with timber jambs, ready-made to standard residential sizes.

CS SlimSlider™: Extruded aluminium frame and track with split aluminium and timber jambs to suit 70 mm stud walls

CS SoundStop™: Extruded aluminium frame, track and jambs with acoustic tile cavity insulation and sound rated door.

- CS EasyOpen™: Extruded aluminium frame and track with aluminium or timber jambs with lever handle hardware and suitable for disabled access.
- CS Ultimate™: Extruded aluminium frame and track with aluminium or timber jambs and for use with 140 mm wall framing and door thickness to 88 mm.
- CS RakingHead™: Extruded aluminium frame and track with timber jambs and with gravity self-close and soft close technology.
- CS OvertakingDoors™: Extruded aluminium frame and track with timber jambs with multiple tracks, overtaking pick-up and door guide system.
- CS SquareFormed™: Extruded aluminium frame and track with split jamb, full-height and no closing jamb detail.

### **CS Cavity Sliders Detail Options™**

A range of architectural detail options for cavity sliders. Delete detail options not applicable to project.

#### Detail options:

- SofStop®: Single (soft close) or twin (soft open and close).
- Full-Height™: Track flush with ceiling.
- CornerMeeting™: Overlapping corner detail with doors meeting at 90° angle.
- NoClosingJamb™: Flush finish at wall/door junction.

Minimalist finish allowing for a concealed door installation.

- ShadowLine™: Shadowline detail around jambs and head.
- SquareStop™: For concealing jambs.
- Extra-wideJambs™: Jambs for non-standard wall linings.
- AluSealed™: Prefinished jambs for commercial applications and architectural designs or where an over-height door solution is required.
- Hi-ImpactJambs™: Jambs for high impact areas.
- Tile Support Insert Panel: Capable of supporting tiles up to a total lining mass of 50 kg/m<sup>2</sup>.

All 90 mm CS Cavity Sliders sliding units are capable of supporting tiles up to a total lining mass of 50 kg/m² given the following conditions are met:

A full plywood panel is incorporated into the cavity on the side to which tiling will be applied.

The Cavity Slider unit is installed as per the installation instructions.

A 9 mm fibre cement tile backing board is used as a wall lining and is installed to the board manufacturer's recommendations.

Tiles are installed as per the tile manufacturer's recommendations.

The maximum thickness of the lining including the fibre cement sheet, the tiles and the tile adhesive, does not exceed 30 mm.

# CS Cavity Sliders DoorLeaves™

A range of aluminium, glass and specialised doors to suit cavity sliders, hinged or surface sliding applications. Delete doors not applicable to project.

### Doors:

- NewYorker™: Prefinished aluminium framed glazed door.
- AluTec™: Aluminium door with 7 mm vertical edge profile, powder coated primer (ready to paint).
- MirrorLite™: Aluminium framed door faced with mirror to both sides.
- WhiteBoard™: Steel porcelain whiteboard, aluminium edge strips and polystyrene core.

# **CS Cavity Sliders Pre-HungJambs™**

AluJambs™: Aluminium jambs for hinged door systems to complement AluSealed™ aluminium cavity slider jamb profiles.

Jambs for pre-hung doors and can be supplied with NewYorker™ or AluTec™ doors. Delete if not applicable to project.

# CS Cavity Sliders TrackSystems™

A range of track systems for surface sliding applications based on cavity slider tracks and use with the range of CS Cavity Slider doors. Delete track systems not applicable to project.

BarnDoorTrack™: Wall mounted extruded aluminium track for exposed internal applications.

External option available.

FH-CeilingMountTrack™: Ceiling mounted extruded aluminium track for flush finish.

HeavyDutyTrack™: Ceiling mounted extruded aluminium track for concealed or exposed applications.

Partition-TopMountTrack™: Ceiling mounted extruded aluminium track for concealed or exposed applications.

WallMountTrack™: Wall mounted extruded aluminium track with removable aluminium pelmet and end panels.

### CS Cavity Sliders WardrobeSliders™

A range of wardrobe door system incorporating track, carriages and timber or aluminium jambs. Delete wardrobe sliding door systems not applicable to project.

- CS Premier 2T-140™: Extruded aluminium track with aluminium or timber jambs and head for use with 140 mm wall framing and 2, 3 or 4 doors.
- CS Premier 3T-190™: Extruded aluminium track and floor guide with aluminium or timber jambs and head for use with 190 mm wall framing and 3, 6 or more doors.
- CS TopFix 2T-90™: Extruded aluminium track/head with optional timber jambs for use with 90 mm wall framing and 2 doors.

# CS Cavity Sliders AutomaticUnits™

A range of automated cavity sliding units with individually designed parts, providing security and accommodating oversized, custom made and heavy doors. Delete automatic units not applicable to project.

- CS AutoCav<sup>™</sup> Commercial: General purpose motorised operation with programmable controller and choice of access controls.
- CS AutoCav™ Residential: General purpose motorised operation with standard switch, precommissioned in the factory and supplied fully assembled.
- CS AutoCav™ WC: Motorised operation for toilet facilities with programmable controller and internal and external indicator plates.

### CS CaviLock® Locks and latches

A range of architectural door hardware to suit any sliding door application.

- CS CaviLock® CL100: Commercial range mortise lock.
- CS CaviLock® CL200: Residential range of passage and privacy locks.
- CS CaviLock® CL400: Commercial and residential range of mortice, passage and privacy locks.

## 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.

# **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, fixed to the door or frame to the manufacturer's recommendations.

### 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 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: ≥ 25 mm.
- Thickness: ≥ 1.5 mm.

Depth of fixing for building into masonry:

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

Jamb fixing centres: ≥ 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 depression 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.

#### 3.2 DOORS

### **Priming**

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

### **Tolerances**

Installation: To AS 2688 (2017) Section 7.

### 3.3 CS CAVITY SLIDERS

### Installation

Requirement: Conform to CS Cavity Sliders installation recommendations and standard construction drawings.

# 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 CS Cavity Sliders 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: [complete/delete]

#### Select from the following:

- 10 years: CavitySliders, WardrobeSliders, Pre-HungJambs, TrackSystems.
- 5 years: DoorLeaves, AutomaticUnits.
- 2 years: CaviLock.
- 1 year: Electrical components and parts.

#### 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 DOOR TYPES SCHEDULE

# Flush panel doors construction schedule

	Α	В	С
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

	Α	В	С
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	В	С
Product			
Function			
Carrier material and finish			
Seal insert type and material			
Complementary seal			

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.

### 4.2 CS CAVITY SLIDERS

# CS Cavity Sliders cavity sliding door schedule

, , ,	A	В	С
Product type			
Location			
Wall framing size (mm)			
Wall lining thickness (mm)			
Leaf size (mm)			
Jamb finish			
Door type			
Door thickness (mm)			
Door finish			
Detail options			
Lock type			
Handle type			
Handle height (mm)			
Automatic units			

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.

Product type: Select from the following range of CS Cavity Sliders cavity sliding doors:

- CS TimberFormed™.
- CS FramelessGlass™.
- CS SpaceMaker™.
- CS SlimSlider™.
- CS SoundStop™.
- CS EasyOpen™.
- CS Ultimate<sup>™</sup>.
- CS RakingHead™.
- CS OvertakingDoors™.
- CS SquareFormed™.

Location: Nominate the location.

Wall framing size (mm): Select from 70 mm, 90 mm or 140 mm.

Wall lining thickness (mm): e.g. 10 mm, 13 mm.

Leaf size (mm): Nominate the height and width.

Jamb finish: e.g. Timber, Aluminium anodised, Aluminium powder coated.

Door type: e.g. Solid core, or select from the following range of CS Cavity Sliders doors:

- NewYorker™.
- AluTec™.
- MirrorLite™.
- WhiteBoard™.

Door thickness (mm): 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.

Door finish: e.g. Paint, Anodised, Powder coated.

Detail options: Select from the following range of CS Cavity Sliders detail options:

- SofStop™.
- Full-Height™.
- CornerMeeting™.
- NoClosingJamb™.
- Shadowline™.
- SquareStop™.
- Extra-wideJambs™.
- AluSealed™.
- Hi-ImpactJambs™.
- Tile Support Insert Panel.

Lock type: Select from the following range:

- CS CaviLock<sup>®</sup>
- CS CaviLock<sup>®</sup>
- CS CaviLock<sup>®</sup>

Handle type: Select from the following range:

- CL100 Lever.
- CL100 LaviLock.
- CL100 FlushTurn.
- CL100 Louise.
- CL100 DigiLock.
- CL200 Privacy.
- CL200 Passage.
- CL400 Magnetic.
- CL400 Passage.
- CL400 Privacy.
- Timber door edge pull.
- Aluminium door edge pull.

Handle height (mm): Nominate the height to the centre of the handle from the bottom of the door.

Automatic units: Select from the following range:

- CS AutoCav™ Commercial.
- CS AutoCav™ Residential.
- CS AutoCav™ WC.

# CS Cavity Sliders wardrobe sliders schedule

	Α	В	С	
Product type				
Location				
Wall framing size (mm)				
Wall lining thickness (mm)				

	A	В	С
Leaf size (mm)			
Jamb finish			
Door type			
Door finish			
Number of doors			
Detail options			
Handle type			
Handle height (mm)			

Product type: Select from the following range of CS Cavity Sliders wardrobe sliders:

- CS Premier 2T-140™.
- CS Premier 3T-190™.
- CS TopFix 2T-90™.

Location: Nominate the location.

Wall framing size (mm): Select from 90 mm, 140 mm or 190 mm.

Wall lining thickness (mm): e.g. 10 mm, 13 mm.

Leaf size (mm): Nominate the height and width.

Jamb finish: e.g. Timber, Aluminium anodised, Aluminium powder coated.

Door type: e.g. Solid core, or select from the range of CS Cavity Sliders doors:

- NewYorker™.
- AluTec™.
- MirrorLite™.
- WhiteBoard™.

Door finish: e.g. Paint, Anodised, Powder coated.

Number of doors: Nominate the number of doors.

Detail options: Select from the following range of CS Cavity Sliders detail options:

- SofStop™.
- Full-Height™.
- NoClosingJamb™.
- Shadowline™.
- SquareStop™.

Handle type: Select from the following range:

- CL200 Passage.
- CL400 Passage.

Handle height (mm): Nominate the height to the centre of the handle from the bottom of the door.

# CS Cavity Sliders track systems schedule

	Α	В	С
Product type			
Number of tracks			
Stacking system			
Pelmet			
Pelmet finish			
Door type			
Door hardware			

Product type: Select from the following range of CS Cavity Sliders track systems:

- BarnDoorTrack™.
- HeavyDutyTrack™.
- FH-CeilingMountTrack™.
- Partition-TopMountTrack™.
- WallMountTrack™.

Number of tracks: Nominate the number of tracks.

Stacking system: e.g. Required.

Pelmet: For partition top mount track, e.g. Flush, Horizontal leg.

Pelmet finish: e.g. Anodised, Powder coated.

Door type: Door type: e.g. Solid core, or select from the range of CS Cavity Sliders doors.

- NewYorker™.
- AluTec™.
- MirrorLite™.
- WhiteBoard™.

Door hardware: Select from CS Cavity Sliders range of locks, latches and handles.

#### 4.3 DOORSETS SCHEDULE

# **Doorsets performance schedule**

	Α	В	С
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

	Α	В	С
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)			
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

	Α	В	С
Туре			
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 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	В	С
Pedestrian traffic			
Door configuration			
Drive type			
Drive location			

	Α	В	С
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			

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 BS 4255	1990	Specification for general-purpose flexible PVC compounds for moulding and extrusion 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)