# 0551b Joinery

**Worksection application**

This worksection *Template* is applicable to the shop fabrication and site installation of custom made joinery fixtures and trim to walls and openings.

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](http://www.natspec.com.au).

Optional text

Text in this font (blue with a grey background) covers items specified less frequently. It is provided for incorporation into *Open* 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:

* *ACCULINE sundry items* for IPC and wall protection systems.
* *Windows and glazed doors*.
* *Glazing*.
* *Glass components* for glass balustrades.
* *Metalwork – fabricated*.
* *Stainless steel benching*.
* *Stone and terrazzo tiling*.
* *Applied wall finishes* for fabricated and in situ applied wall finishes.
* *Painting*.
* *Electrical design and install* for connections for lighting.

Cross references

Worksections that reference this worksection are:

* *Adhesives, sealants and fasteners*.

Material not included in NATSPEC

Some projects may include items not covered by this worksection. You may need to create new text, or modify this text or a suitable worksection. For example:

* Shop painting opaque lacquers and enamels, and clear finishes.

Documenting this and related work

You may document this and related work as follows:

* Note additional noggings or stud stiffeners required for the support of wall hung units in *Partitions – framed and lined*.
* Import applicable material from *Stainless steel benching*, or *Metalwork – fabricated* for stainless steel features to joinery fixtures.
* Import applicable material from *Stone and terrazzo tiling*, for stone finishes to joinery fixtures.
* Import applicable material from *Glazing* for processed glass features or finishes.
* Import material from *Workstations* for cabling management, **Performance requirements**.
* Show the location and layout of stairs, ladders and walkways to your office documentation policy.

Specifying ESD

The following may be specified by retaining default text:

* Linoleum.

The following may be specified by including additional text:

* Low/zero VOC adhesives and finishes, e.g. water based or soy based adhesives.
* Recycled timber or timber from a sustainable source.
* Recycling of off-cut panels.
* Recycled material content, e.g. for fibreboards and particleboards, benchtops manufactured from bamboo fibres and post-consumer paper.
* Veneers and laminates which contain paper based products, recycled content and no urea formaldehyde added.
* Alternative wood materials, e.g. bamboo.
* Selecting timbers with higher durability.
* Joinery systems which are modular, reconfigurable, relocatable and re-usable.
* Recyclable materials, e.g. linoleum.

Refer to the NATSPEC TECHreport TR 01 on specifying ESD.

## General

### Responsibilities

#### General

Requirement: Provide joinery, as documented.

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

### Cross references

#### General

Requirement: Conform to the following worksection(s):

* *General requirements*.

The *General requirements* worksection contains umbrella requirements for all building and services worksections.

*

List the worksections cross referenced by this worksection. The *General requirements* worksection references the *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.

### Standards

#### General

Tactile indicators: To AS/NZS 1428.4.1.

The BCA also cites AS 1428.4-1992.

For design for disabled access and mobility, see AS 1428.1. The BCA also cites AS 1428.1-2001. For balustrades, see BCA 3.9.2 for Class 1 and Class 10 buildings and BCA D2.16 for Class 2 to 9 buildings.

### Tolerances

#### General

Requirement: Fabricate and install joinery items to substrates undamaged, plumb, level, straight and free of distortion**.**

#### Tolerances table

| Property | Tolerance  |
| --- | --- |
| Plumb and level | 1:800  |
| Offsets in flush adjoining surfaces | 0.5 mm |
| Offsets in revealed adjoining surfaces | 2 mm |
| Alignment of adjoining doors | 0.5 mm |
| Difference in scribe thickness for joinery items centred between walls | 2 mm |
| Doors centred in openings | 0 |
| Joints in finished surfaces | 0 |

### Submissions

**Certification**

This subclause is not included in this basic version. The full worksection is part of the BUILDING Professional package.

#### Drawings

Proprietary items: Submit the manufacturer’s standard drawings and details showing:

* Methods of construction.
* Assembly and fixing, with dimensions and tolerances.

#### Maintenance manuals

General: Submit manufacturer’s published recommendations for service use.

**Samples**

This subclause is not included in this basic version. The full worksection is part of the BUILDING Professional package.

#### Shop drawings

General: Submit shop drawings to a scale that best describes the detail, showing the following:

* Overall dimensions.
* Materials, thicknesses and finishes of elements including doors, divisions, shelves and benches.
* Type of construction including mitre joints and junctions of members.
* Hardware type and location.
* Temporary bracing, if required.
* Procedures for shop and site assembly and fixing.
* Locations of benchtop joints.
* Stone benchtop layout including joint arrangement and penetrations.
* Locations of sanitary fixtures, stoves, ovens, sinks, and other items to be installed in the units.
* Relationship of fixture to adjacent building elements.
* Details of fabrication involving other trades or components.

e.g. toughened glass balustrade panels.

* Proposals for the break-up of large items as required for delivery to the site.
* Proposed method of joining the modules of large items.

Timing: Before fabrication.

If delivery involves a goods lift nominate the car size and capacity.

These shop drawing requirements assume the installation is fully detailed. Edit as required.

#### Subcontractors

General: Submit names and contact details of proposed suppliers and installers.

Delete if supplier/installer details are not required.

### Inspection

#### Notice

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

* Shop fabricated or assembled items ready for delivery to the site.
* Openings prepared to receive assemblies.
* Site erected assemblies on completion of erection, before covering up by cladding and encasing.
* Surfaces prepared for, and immediately before, site applied finishes.
* Completion of installation.

Amend to suit the project, adding critical stage inspections required.

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

## Products

The prompts for this subsection set out the range of characteristics which need to be considered when specifying sheet products. If there are several locations or applications requiring differing types or grades of sheet, tabulate or complete a separate schedule for each, so that a notation on a drawing would call up the appropriate type of sheet.

### Delivery and storage

#### General

Requirement: Deliver joinery units to site in unbroken wrapping or containers and store so that its moisture content is not adversely affected. Do not store in areas of wet plaster. Keep storage time to a minimum by delivering items only when required for installation.

### Joinery materials and components

#### Visible work

Clear finished timber and veneer: Make sure all visible surfaces are free of branding, crayon or chalk marks and of blemishes caused by handling.

#### Joinery timber

Hardwood for trim: To AS 2796.1.

Hardwood for furniture: To AS 2796.3.

* Grade:

Three grades are provided in AS 2796.1 and AS 2796.3, select (SEL), medium feature (MF) and high feature (HF). Refer to AS 2796.2 for grade descriptions.

Seasoned cypress pine: To AS 1810.

* Grade:

1 or 2.

Softwood for trim: To AS 4785.1.

Softwood for furniture: To AS 4785.3.

* Grade:

Separate grades are given for pinus and non-pinus species of clear (FCL), select (FSEL), standard (FSTD) and utility (FUTL). An additional furniture appearance grade (FAP) is specified for the pinus species. Refer to AS 4785.2 for grade descriptions.

Finished sizes of milled timbers: Not less than the documented dimensions unless qualified by a term such as nominal, out of or ex to which industry standards for furnished sizes apply.

It is better to document specialty timber by its finished size.

#### Plywood

Interior use generally: To AS/NZS 2270.

Interior use, exposed to moisture: To AS/NZS 2271.

Visible surface with a clear finish: Veneer quality A.

Other visible surfaces: Veneer quality B.

#### Non-structural glued laminated timber

Standard: AS 5067.

Service class:

AS 5067 service classes are based on the temperature and humidity of the in service environment. Typical applications are as follows:

* Service class 1: Interior framing, staircases.
* Service class 2: Kitchens, vanities, painted outdoor furniture.
* Service class 3: Sauna benches, unpainted outdoor furniture.

Appearance grade:

AS 5067 grades appearance as follows:

* Select grade good 1 side, e.g. bench tops.
* Select grade good 2 sides, e.g. exposed stair treads.

There are also industrial and non-appearance grades.

#### Wet processed fibreboard (including hardboard)

This material has a number of features that make it an appealing substitute for wood in applications where traditional mouldings have been used. In its sheet form it can be used as a carcassing material and painted or, more commonly, the high moisture resistant grade is used, overlaid with a similar range of finishes to that available in particleboard.

Standard: To AS/NZS 1859.4.

* Classification:

e.g. general purpose, tempered (MR) or exterior.

* Bending strength:

L, M or H, low, medium or high bending strength.

#### Particleboard

Standard: To AS/NZS 1859.1.

* Classification:

Standard (STD), moisture resistant (MR) or high performance (HP) intended for use in continuously humid conditions or for load bearing application. Alternatively, quote the manufacturer’s designations when specifying particleboard if you do not feel comfortable with the generic provisions. Both standard and high moisture resistant grades are available overlaid with a range of finishes, most commonly low pressure melamine and timber veneers. Matching melamine edge strips are usually available for melamine overlaid particleboard and there is a degree of coordination between the range of decorative overlaid boards and decorative laminated sheets. Check manufacturers’ current availability lists before specifying. Standard grade particleboard is available edge stripped in solid timber and is suitable for raw shelving etc.

Melamine overlaid particleboard: Particleboard overlaid on both sides with low pressure melamine.

#### Dry-processed fibreboard (including medium density fibreboard)

Decorative overlaid high moisture resistant medium density fibreboard is being widely promoted and used for custom work in preference to the particleboard equivalent. A wider range of colours is available ex stock and the improved machining qualities often make it preferred by fabricators. However, it is more expensive than particleboard, which seems to remain the preferred material in the loose furniture industry.

Standard: To AS/NZS 1859.2.

Includes general purpose (STD MDF), ultra low density (STD Ultra LDF), low density (STD LDF), high density (STD HDF), moisture resistant (MR HDF) or (MR MDF) or high performance (HP MDF).

Melamine overlaid medium density fibreboard: Medium density fibreboard (STD MDF) overlaid on both sides with low pressure melamine.

#### Decorative overlaid wood panels

Standard: To AS/NZS 1859.3.

AS/NZS 1859.3 covers low pressure melamine faced with PVC film and paper foils and wood veneer.

**Certification** and **High-pressure decorative laminate sheets**

These subclauses are not included in this basic version. The full worksection is part of the BUILDING Professional package.

#### Stone facings

General: Provide stone or engineered stone slabs within the visual range of the approved samples. Repair mud veins or lines of separation that are integral to the selected pattern with resin fillers and back lining.

**Toughened glass panels**, **Vinyl and linoleum** and **Plastics and rubber**

These subclauses are not included in this basic version. The full worksection is part of the BUILDING Professional package.

#### Splashbacks

Provide laminated, colourback glass, ceramic mosaic tiles, glass mosaic tiles or stainless steel.

Glass: 6 mm toughened colourback glass.

* Standard: To AS/NZS 2208.
* Type:

Stainless steel: Type 304, fine linished finish.

### Veneers

#### Timber veneer

Veneer quality: To AS/NZS 2270.

Grades (minimum requirement):

* Select grade, veneer quality A, for visible surfaces to have clear finish or to have no coated finish.
* General purpose grade, veneer quality B, for other visible surfaces.

Requirement: Provide veneers slip matched and flitch batched and falling within the visual range of the approved samples.

Veneered item:

Veneered item: e.g. Flush doors, Cupboard doors, Cupboard ends, Bench tops.

Veneer timber species:

Type of cut:

Type of cut: e.g. Sliced, Semi-rotary peeled or Rotary peeled.

Matching arrangement:

Matching arrangement: e.g. Book, Centre, Diamond, Random or Slip.

#### Vinyl veneer

Type: Proprietary unbacked vinyl fabric factory-bonded to the designated surface.

Veneered item:

Type and pattern:

Use manufacturer’s brand name or samples.

### Joinery items

If joinery work is fully detailed you could cross refer to the drawings and add the following notes as an alternative to the materials and components listed separately below for typical joinery items or assemblies.

#### General

Refer to documents as follows:

* Drawings: Joinery units and their location, indicative construction details, scribes and trims, materials, dimensions and thicknesses, and finishes.
* Drawings: Confirm on site all dimensions noted, after the completion of partitions.
* Finishes schedules or drawings: Finishes selections.
* Specification: Joinery hardware fittings and systems.

Edit as appropriate. Delete if joinery is not fully detailed.

### Joinery assemblies

The selection of medium density fibreboard or particleboard can in most cases be left to the fabricator. Vary the specification if you have a preference. Colour availability is more restricted in particleboard substrates. High moisture resistant particleboard is the default. Its use is essential in all domestic kitchen locations. Vary if a standard particleboard substrate is acceptable. Only the high moisture resistant grade of medium density fibreboard is available in the melamine overlaid products.

#### Standard

General: To AS/NZS 4386.1.

The associated installation standard, AS/NZS 4386.2, is a mix of shalls and shoulds and should be cited with care if at all. It may be better to use it as a guide for the preparation of installation clauses. For design brief preparation, see SAA HB 111.

AFRDI Blue Tick:

The Australasian Furnishing Research and Development Institute scheme.

#### Plinths

Built-in cupboards, particularly in domestic kitchens, usually consist of a plinth, a carcass and a top. The plinth is scribed to the floor to provide a level base for the carcasses. Usually the plinth forms the toe recess. Given the needs of on-site working, moisture resistance and durability, plywood is probably the best general substrate. Other materials may be required e.g. to match timber or tile skirtings.

Material: Select from the following:

* Exterior general purpose plywood.
* High moisture resistant particleboard.
* High moisture resistant medium density fibreboard.

Thickness: 16 mm.

Fabrication: Form up with front and back members and full height cross members at not more than 900 mm centres.

Finish: High-pressure decorative laminated sheet.

* Class:
* Type:
* Pattern:
* Texture:
* Colour:
* Fasteners: Conceal with finish.

Installation: Scribe to floor and secure to wall to provide level platform for carcasses.

#### Carcasses

Material: Select from the following:

* Overlaid high moisture resistant particleboard.
* Overlaid high moisture resistant medium density fibreboard.

Thickness: 16 mm.

16 mm board is generally adequate for most construction. Vary the thickness if appropriate.

Joints: Select from the following:

* Proprietary mechanical connections.
* Dowels and glue.
* Screws and glue.
* Proprietary joining plates and glue.

Adjustable shelves: Support on proprietary pins in holes bored at equal centres vertically.

* Spacing: 32 mm.

A variety of hole size and drilling centres are in use, vary as required. For bookshelves a maximum span of 600 mm is recommended.

Finish:

Select High-pressure decorative laminated sheet described as follows:

* Class.
* Type.
* Pattern.
* Texture.
* Colour.

Or select veneer as noted in **Veneers**.

A common practice is to use a white melamine overlaid board for construction generally and to laminate gable ends, exposed backs and insides to the selected colour. This eliminates the need for secret fixings and gives the widest choice of colour. Alternatively, secret fixings can be used and melamine overlaid board used throughout except for bench tops. Heavy duty melamine overlaid boards are available which are claimed to match the performance of laminated surfaces. Specify by proprietary item if required.

Fasteners: Conceal with finish.

Installation: Secure to walls at not more than 600 mm centres.

#### Drawer fronts and doors

Material: Select from the following:

* Melamine overlaid high moisture resistant particleboard.
* Melamine overlaid high moisture resistant medium density fibreboard.

Thickness: 16 mm.

Door size: Not exceeding 1.5 m2 on face, with 2400 mm maximum height and 900 mm maximum width.

This produces the following maximum sizes:

* Maximum height 2400 mm - maximum width 625 mm.
* Maximum width 900 mm - maximum height 1670 mm.

Amend the text if you prefer doors to be less than these maximum sizes or show door sizes on the drawings. Generally hinged doors work best being high and narrow and sliding doors work best being short and wide.

Drawer fronts: Rout for drawer bottoms.

Finish:

Colour:

#### Drawer backs and sides

A variety of proprietary systems as well as traditional construction are available; the default here gives good construction and finish.

Material: PVC film wrapped particleboard.

i.e. PVC on both faces and all edges.

Thickness: 12 mm.

Colour:

Installation: Mitre corners leaving outer skin of foil intact, finish with butt joints, glue to form carcass and screw to drawer front. Rout for drawer bottoms.

#### Drawer bottoms

Material: PVC film laminated hardboard.

PVC film faces:

PVC film faces: e.g. One or Two.

Thickness: 3 mm.

Colour:

#### Drawer and door hardware

Specify by proprietary item and schedule if required. Refer to *Door hardware* worksections which covers items such as hinges, keys, locks, latches, furniture and door controllers. Also consider locks and keys, if required.

Hinge types: Concealed metal hinges with the following features:

* Adjustable for height, side and depth location of door.
* Self-closing action.
* Hold open function.
* Angle of opening:
* Nickel plated.

Variables include overlay (amount of side panel covered by the door, e.g. full overlay, half overlay and inset) and hinge arm cranking (amount that the hinge arm is cranked from the straight e.g. 10 mm means an offset of 10 mm) and opening angle. Leave these to be selected by the fabricator, unless you have particular requirements.

Piano hinges: Chrome plated steel, extending full height of doors.

Slides: Metal runners and plastic rollers with the following features:

* 30 kg loading capacity.
* Closure retention.
* White thermoset powder coating or nickel plated.

Slides are available in a fully concealed pattern if required and with a variety of features including full and over extension and self-closing action. Specify any features required.

Pulls:

Stops:

There is a wide range of proprietary hardware available and those that may need to be considered include:

* Knobs and handles (pulls).
* Stays and flap hinges.
* Catches (particularly child-proof safety catches - recommended where drugs and chemicals are stored).
* Locks.
* Shelf supports and revolving units.
* Wardrobe and hanging accessories.
* Wireware.
* Extension and swivel mechanisms.

#### Full height doors

Delete if these doors are specified in the *Doors and access panels* worksection and included in a door schedule.

Material:

Size:

Thickness:

Finish:

#### Flaps and pull-out shelves

Material:

Size:

Thickness:

Finish:

### Working surfaces

Nominate or refer to detail:

* Edge treatment.
* Joints.
* Junctions with other materials.
* Solid plastic benchtops: Import material as required from Stone benchtops.

#### Laminated benchtops

If you give a layout of joints, bear in mind the practicalities of transport and on-site handling. Edit Submissions accordingly.

Material:

Select high moisture resistant particleboard or blockboard.

Finish: High-pressure decorative laminated sheet.

* Class:
* Type:
* Pattern:
* Texture:
* Colour:

Exposed edges: Extend laminate over shaped nosing, finishing more than 50 mm back on underside. Splay outside corners at 45°.

Balance underside: Extend laminate to the undersides of benchtops.

So that any forces induced by changes in moisture content will not cause warping.

Installation: Scribe to walls. Fix to carcass at least twice per 600 mm length of benchtop.

Joint sealing: Fill joint with sealant matching finish and clamp with proprietary mechanical connectors.

#### Stone benchtops

See ASAA natural stone design manual for information on natural stone benchtops.

Material:

Natural stone or Re-constituted stone.

* Type:
* Thickness:

Benchtop backing:

* Material:
* Thickness:
* Finish:
* Sealant:

Balance underside: Laminate undersides of benchtops.

To avoid warping in the backing induced by moisture.

## Execution

### Joinery

#### General

Joints: Provide materials in single lengths whenever possible. If joints are necessary, make them over supports.

Framing: Frame and trim where necessary for openings, including those required by other trades.

​Concealed surfaces: Prime surfaces concealed by substrates.

Deficiencies: Examine joinery units for completeness and remedy deficiencies.

Substrate: Damp clean and vacuum substrate surfaces that will be permanently concealed.

Openings: Provide openings for the following:

Provide openings for the following e.g. equipment: If scheduling required openings be sure to be comprehensive, or leave this trade coordination matter to the contractor.

#### Acclimatisation

General: Acclimatise the joinery items by stacking in the in-service conditions with air circulation to all surfaces after the following are complete:

* Air conditioning operational.
* Lighting operational.
* Site drainage and stormwater works are complete.
* Space fully enclosed and secure.
* Wet work complete and dry.

#### Accessories and trim

General: Provide accessories and trim necessary to complete the installation.

#### Fasteners

The range of fasteners available is so wide that it is not recommended that specifiers nominate types unless they have a particular requirement in mind. Some fasteners have the advantage of a knock-down capability and this may be a consideration. Stapling and nailing are excluded but may be acceptable in some classes of work. If sufficient for your purposes, say so.

Visibility: Do not provide visible fasteners except in the following locations:

* Inside cupboards and drawer units.
* Inside open units, in which case provide proprietary caps to conceal fixings.

Visible fasteners: Where fasteners are unavoidable on visible joinery faces, sink the heads below the surface and fill the sinking flush with a material compatible with the surface finish. In surfaces which are to have clear or tinted finish, provide matching wood plugs showing face (not end) grain. In surfaces which are to have melamine finish, provide proprietary screws and caps finished to match.

Fix joinery units to substrates as follows:

* Floor mounted units: 600 mm centres maximum.
* Wall mounted units: To each nogging and/or stud stiffener.

Fasteners: Screws with washers into timber or steel framing, or masonry anchors.

#### Adhesives

As in the case of fasteners, the choice of these is best left to the fabricator who should rely on the adhesive manufacturer’s recommendations.

General: Provide adhesives to transmit the loads imposed and for the rigidity of the assembly, without causing discolouration of finished surfaces.

#### Finishing

Junctions with structure: Scribe, plinths, benchtops, splashbacks, ends of cupboards, kickboards and returns to follow the line of structure.

Joints: Scribe internal and mitre external joints.

Edge strips: Finish exposed edges of sheets with edge strips which match sheet faces.

* Solid timber edge strips:

Specify or detail any special edge strip requirements e.g. solid timber throughout, or to bench tops only. Nominate if veneer or plastic.

Matching: For surfaces which are to have clear or tinted finish, arrange adjacent pieces to match the grain and colour.

Hygiene requirements: To all food handling areas and voids at the backs of units in all areas, seal all carcass and junctions wall/floor, and cable and pipe entries with silicone beads for vermin proofing. Apply water resistant sealants around all plumbing fixtures and make sure sealants are fit for purpose.

#### Benchtops

Installation: Fix to carcass at least twice per 600 mm length of benchtop.

Joint sealing: Fill joints with sealant matching the finish colour and clamp with proprietary mechanical connectors.

Edge sealing: Seal to walls and carcasses with a sealant, which matches the finish colour.

#### Splashbacks

Glass: Fix with non-acidic silicone adhesive. Apply at the rate recommended by the manufacturer.

Installation: Clean the back of the glass panel and apply walnuts of adhesive together with double sided adhesive tape for temporary support, and affix directly to the substrate.

#### Labelling

General: Permanently mark each unit of furniture with the manufacturer's name, on an interior surface.

### Timber stairs

For information on timber stairs see WoodSolutions 08.

#### Set-out

General: Set out stair rod to give uniform risers and uniform treads respectively in each flight.

#### Fabrication

Closed strings: Trench for treads and risers.

Cut strings: Profile for treads and risers. Mitre riser ends.

Treads: Arris nosings to a pencil round. Return nosings at cut strings. Groove for riser tongue in closed rise stair. Set rise 19 mm back from nosing.

Nosing strip: To BCA D2.13.

Top tread: Flush with finished floor, otherwise to match stair treads. Provide similar tread section as nosing to floor edges around stairwell.

Risers: Tongue to tread. Mitre to string in cut string stairs.

#### Installation

General: Glue joints in internal work. In closed rise stairs wedge treads and risers to strings. Plant 2 glue blocks behind each tread to riser junction. Trim floors to carry ends of stairs and around stair well.

Stair bolts (to open rise close string stairs): 8 mm diameter mild steel, one at each end and one at centre of flight, transversely between strings. Draw strings tight against ends of treads.

Fascia: Of depth sufficient to overlap 19 mm below ceiling, fixed to floor joists hard up under nosing.

Trim: Provide beads and mouldings as necessary, including a scotia or similar planted under the tread nosing against the risers and cut strings, a bead between wall strings and wall, and a bead behind the fascia over the ceiling finish.

### Timber balustrades

Determine design loads for balustrades in conformance with AS/NZS 1170.1 and AS/NZS 1170.2.

#### General

Requirement: Provide balustrading to stair and landing, consisting of newels, handrail, balusters, and associated mouldings.

#### Newels

General: Halve and bolt to strings. Turn tops to detail.

#### Handrails

Installation: Install handrails on edge, Stubbing tenon to newels.

Bullnose arrises: 13 mm radius.

#### Balusters

Installation: Stub tenon to handrail at top and to tread or floor at bottom.

Spacing: At 100 mm centres.

**PROPRIETARY TIMBER CIRCULAR STAIR**

This clause is not included in this basic version. The full worksection is part of the BUILDING Professional package.

### Trim

#### General

Requirement: Provide trim such as beads, mouldings, stops and skirtings to make neat junctions between lining components, finishes and adjacent surfaces.

Describe where prompted or refer to detail. Locate to your office documentation policy.

#### Fixing

To masonry walls: Wall plugs at 600 mm centres maximum.

To stud walls: Nail to plate or framing at 600 mm centres maximum.

### Completion

#### Protection

Timber treads: Provide full timber or plywood casing.

#### Cleaning

Temporary coatings: On or before completion of the works, or before joining up to other surfaces, remove all traces of temporary protective coatings.

Requirement: Remove all dust, marks and rubbish from all surfaces and internal spaces. Clean and polish all self-finished surfaces such as anodised and powder coated metals, sanitary ware, glass, tiles and laminates.

## Selections

**Schedules** are a way of documenting a selection of proprietary or generic products or systems by their properties. Document their locations here and/or on the drawings. When showing items in both places, identify them with a common code or tag to assist coordination. **Schedules** are well suited to multiple variants of the same item. If there is only a single instance of different items, a simple list may be sufficient. Make sure there is an entry for every item documented.

Duplicate and customise these **Schedules**, adding and deleting rows and columns, as required, e.g. delete rows if the selection is by the contractor or a proprietary product is selected. A proprietary product is usually selected on the basis of the properties it embodies, so there is generally no need to spell them out in a schedule – an exception being where they relate to options to, or variations from, a standard product.

### Timber stairs

#### Timber stair component schedule

| Member | Timber species or group | Finished sizes (mm) | Finish |
| --- | --- | --- | --- |
| Carriages |  |  |  |
| Closed string |  |  |  |
| Cut string |  |  |  |
| Beads |  |  |  |
| Treads |  |  |  |
| Risers |  |  |  |
| Nosing |  |  |  |
| Soffit lining |  |  |  |

Nosing: Note luminance contrast to AS/NZS 1428.4.1 Appendix E,

**PROPRIETARY TIMBER CIRCULAR STAIR**

This clause is not included in this basic version. The full worksection is part of the BUILDING Professional package.

### Trim

#### Trim schedule

| Property | T1 | T2 | T3 |
| --- | --- | --- | --- |
| Door architraves: Timber species or group |  |  |  |
| Door architraves: Grade |  |  |  |
| Door architraves: Size (h x t) (mm) |  |  |  |
| Door architraves: Finish |  |  |  |
| Window architraves: Timber species or group |  |  |  |
| Window architraves: Grade |  |  |  |
| Window architraves: Size (h x t) (mm) |  |  |  |
| Window architraves: Finish |  |  |  |
| Skirtings: Timber species or group |  |  |  |
| Skirtings: Grade |  |  |  |
| Skirtings: Size (h x t) (mm) |  |  |  |
| Skirtings: Profile |  |  |  |
| Skirtings: Finish |  |  |  |
| Cornices: Timber species or group |  |  |  |
| Cornices: Grade |  |  |  |
| Cornices: Size (h x t) (mm) |  |  |  |
| Cornices: Profile |  |  |  |
| Cornices: Finish |  |  |  |
| Picture rails: Timber species or group |  |  |  |
| Picture rails: Grade |  |  |  |
| Picture rails: Size (h x t) (mm) |  |  |  |
| Picture rails: Profile |  |  |  |
| Picture rails: Finish |  |  |  |
| Dado rails: Timber species or group |  |  |  |
| Dado rails: Grade |  |  |  |
| Dado rails: Size (h x t) (mm) |  |  |  |
| Dado rails: Profile |  |  |  |
| Dado rails: Finish |  |  |  |
| Pelmet: Timber species or group |  |  |  |
| Pelmet: Grade |  |  |  |
| Pelmet: Size (h x t) (mm) |  |  |  |
| Pelmet: Profile |  |  |  |
| Pelmet: Finish |  |  |  |

T1, T2, T3: These designate each instance or type or location of the item scheduled. Edit to align with the project’s codes or tags.

Coordinate codes in the **Schedule** with those that appear on drawings.

Door architraves: Timber species or group: e.g. Radiata pine, MDF.

Door architraves: Grade: e.g. Select, Clear, HMR.

Door architraves: Size (h x t) (mm): e.g. 65 x 19.

Door architraves: Finish: e.g. pre-primed.

REFERENCED DOCUMENTS

**The following documents are incorporated into this worksection by reference:**

AS 1428 Design for access and mobility

AS/NZS 1428.4.1 2009 Means to assist the orientation of people with vision impairment - Tactile ground surface indicators

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 1859.3 2005 Decorative overlaid wood panels

AS/NZS 1859.4 2004 Wet-processed fibreboard

AS/NZS 2208 1996 Safety glazing materials in buildings

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 2796.3 1999 Timber for furniture components

AS/NZS 4386 Domestic kitchen assemblies

AS/NZS 4386.1 1996 Kitchen units

AS 4785 Timber - Softwood - Sawn and milled products

AS 4785.1 2002 Product specification

AS 4785.3 2002 Timber for furniture components

AS 5067 2003 Timber - Non-structural glued laminated - Performance and production requirements

BCA D2.13 2015 Access and egress - Construction of exits - Goings and risers

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

AS 1170 Structural design actions

AS/NZS 1170.1 2002 Permanent, imposed and other actions

AS/NZS 1170.2 2011 Wind actions

AS 1428 Design for access and mobility

AS 1428.1 2009 General requirements for access - New building work

AS 1428.4 1992 Tactile ground surface indicators for the orientation of people with vision impairment

AS 2796 Timber - Hardwood - Sawn and milled products

AS 2796.2 2006 Grade description

AS/NZS 4386 Domestic kitchen assemblies

AS/NZS 4386.2 1996 Installation

AS 4785 Timber - Softwood - Sawn and milled products

AS 4785.2 2002 Grade description

SAA HB 111 1998 The Domestic Kitchen Handbook

ASAA 2011 Natural stone design manual

BCA 3.9.2 2015 Acceptable construction - Safe movement and access - Barriers and handrails

BCA D2.16 2015 Access and egress- Construction of exits - Barriers to prevent falls

NATSPEC TR 01 2013 Specifying ESD

WoodSolutions 08 2012 Stairs, balustrades and handrails Class 1 buildings