

SIMPLE OFFICE FITOUT

APRIL 2025

A specification reduces the number of variations, or extras, by enabling a clear understanding of the acceptable level of quality for the project. Without a specification, such as SIMPLE OFFICE FITOUT, you may find a number of small additional items resulting in unexpected, substantial extra cost, and you may not receive the quality you would like. For a specification to be enforceable, it needs to be included or referenced in the contractual agreement between you and your contractor.

SIMPLE OFFICE FITOUT is a reference specification. It provides a quality statement to supplement the drawings prepared by your contractor and is intended to be a condition of the contract between you (the principal) and the contractor. It relies on a design and construct contract in which the contractor takes all design responsibility including the preparation of drawings and compliance with statutory, landlord and other mandatory requirements.

SIMPLE OFFICE FITOUT is suitable for a small tenancy fitout in an existing building that is complete with finishes, services and facilities. For work involving extensive alterations, prestige finishes or additional facilities, consider commissioning an interior designer or architect.

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Use the current edition

This specification is published annually and is aligned with BCA Volume One of the National Construction Code.

A properly documented specification reduces the number of variations (additional things you need to pay for) and provides a clear understanding regarding the quality level that is deemed acceptable. Without a properly documented specification a number of small additional items may lead to substantial additional cost and you may have to accept a lower quality than you would like. For the specification to be enforceable it needs to be included/referenced in your contracts with your contractors.

THE WORK

The building work described in the building contract
dated

LOCATION

Address

THE PARTIES

Owner(s)

Address

Contractor

Address

Australian Business Number (ABN)

Licence/registration number

SIGNATURES

Owner(s)

Date

Contractor

Date

INTRODUCTION

This introduction does not form part of contract. NATSPEC *SIMPLE Office Fitout* is intended as one of a number of documents that make up the contract for the works, including:

- General conditions of contract.
- Special conditions of contract.
- Drawings.
- Schedules.

NATSPEC specification for simple office fitout

This specification is a quality statement supplementing the drawings and has been designed to be a condition of contract between the client and the contractor. The specification is released annually and incorporates changes to the National Construction Code (NCC).

The specification relies on a design and construct contract in which the contractor takes all design responsibility including the preparation of drawings, and conforming with statutory, other mandatory and landlord requirements. It has been prepared for a simple tenancy fitout in an existing building that is complete with most finishes, services and facilities.

For work involving extensive alterations, prestige finishes or additional facilities, consider commissioning the services of an interior designer or architect to produce a specification using the NATSPEC BUILDING Interior package customised for the project.

The contract is to be executed in conformance with this specification and drawings.

The following is a checklist of project specific information that may be required to be shown on the project drawings or other documentation:

0180 Common requirements

- Size and location of mobile shelving or other heavy items.
- Approximate furniture layout.

0453 Doors and access panels

- Location.
- Size.
- Door type: Flush solid core, flush hollow core, aluminium framed and glazed, frameless glass, fire rated doors.
- Operation: Swing on hinges or pivot hung, or sliding doors (select hardware).
- Door frames: Steel or aluminium.
- Acoustic requirements.
- Door grilles.
- Floor clearances.

0455 Door hardware

- Indicate lock function.
- Door furniture style, signs and protection.
- Door closers.
- Master keying.

0521 Partitions – demountable

- Location.
- Type: Indicate product selection as appropriate.
- Glazing: Indicate full or half height.
- Acoustic requirements: Indicate the level of privacy by a required R_w value or by stating that conversations within the room are inaudible outside the room.

- Finish and colour.
- Size and location of mobile shelving or other heavy items.
- Approximate furniture layout.
- Fire hazard properties: Group number (NCC).

0522 Partitions – framed and lined

- Location.
- Type: Indicate product selection as appropriate.
- Glazing (e.g. full or half height).
- Plasterboard lining (e.g. standard or fire rated).
- Acoustic requirements (include R_w).
- Finish and colour.
- Size and location of mobile shelving or other heavy items.
- Approximate furniture layout.
- Fire hazard properties: Group number (NCC).

0524 Partitions – glazed

- Location.
- Type: Indicate product selection as appropriate.
- Glazing (e.g. full or half height).
- Acoustic requirements (include R_w).
- Finish and colour.

0527 Room dividers

- Select a proprietary system.

0530 Suspended ceilings

Reflected ceiling plans showing:

- Ceiling tile alterations.
- Ceiling services alterations and additions:
- Sprinkler locations.
- Lighting layout.
- Emergency Warning and Intercommunication System (EWIS), exit and emergency lighting.
- Air conditioning grilles and registers.
- Lighting including new fittings (e.g. to reception, conference rooms).

0551 Joinery

- Tea room (if additional facilities are required).
- Layout.
- Finishes.
- Appliances.
- Workstations.

0573 Fire extinguishers and blankets

- Check for existing items and their maintenance records.

0650 Floor finishes

- Extent of alterations to the base building finish.
- Product selection.
- Fire hazard properties: Critical radiant flux (NCC).

0671 Painting

- Location of paint finishes.
- Proprietary paint systems including colours.

0702 Mechanical design and install

- Check for existing installation documents and maintenance records.

This specification is intended for office tenancies with typical people and equipment densities, and typical usage. It assumes that the base building air conditioning system will meet the tenant's needs without requiring additional plant or ventilation. Seek professional advice if there are:

- Spaces with higher than average numbers of people (more than about 1 person per 10 m²) like conference and meeting rooms.
- Spaces with heavy equipment heat loads.
- Spaces requiring additional ventilation such as heavy use kitchens or printing rooms.
- Layouts affecting air conditioning zones and/or requiring the relocation of temperature and other controls.

These may require special air conditioning to meet occupant comfort and regulatory requirements. Failing to address them is a major cause of occupant complaints. The drawings must show the air conditioning zones which will assist in considering the above. If additional plant or ventilating is required consider engaging a mechanical engineering consultant.

If the tenancy is to be used out of hours, particularly on weekends, consider how will it be air conditioned and how will it be charged for.

0802 Hydraulic design and install

- Location of plumbing fixtures, tapware and permanently plumbed items such as dishwashers, water heaters, boiling water units and water filters.

0902 Electrical design and install

- Location of telecommunications tenancy distributor (hub) and location of data outlets.
- Location of electrical general purpose socket-outlets and permanently connected equipment.
- Location of appliances (e.g. refrigerator, hot water heater, water cooler), office equipment and workstations.

1033 Sprinklers

- Extent of alterations to the existing system.

FOR REVIEW

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FOR REVIEW

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FOR REVIEW

Make sure all subcontractors are aware of the requirements within <i>0180 Common Requirements</i> .

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FOR REVIEW

0180 COMMON REQUIREMENTS

1 GENERAL

1.1 PRECEDENCE

General

Schedules and drawings: Requirements of schedules and drawings override conflicting requirements in this reference specification.

Order of precedence: If there is conflict or inconsistency between the worksections of this specification, the requirements of worksections take precedence over *0180 Common requirements*.

1.2 ADDITIONAL WORK

Quality

Works beyond the scope of this specification: To the general quality of this fitout specification.

1.3 AUTHORITIES

Compliance

Requirement: Conform to the following:

- The National Construction Code.
- Any building approvals.
- The requirements of local and state or territory government authorities.
- A building fitout guide, if required by the lease.

Electrical and hydraulic services

Electrical and plumbing works: Use only state or territory licensed personnel.

1.4 BASE BUILDING

Possession of site

Permission: Obtain permission and conditions of work required by the building owner or their representative.

Contractor to check

General: Review the following and recommend remedial actions if required:

- Base building fabric: Inspect the base building and notify the tenant of any shortcomings that would affect the fitout works.
- Floor loads: Check adequacy for mobile shelving or other heavy items.
- Air conditioning: Review drawings and other documents describing the existing (base building) air conditioning system and its design basis such as the temperatures, number of people and equipment heat loads allowed for. Make sure these are adequate for the intended use. Make sure every space has both a supply air and a return air path. Allow for door grilles if required to provide a return air path.

Protection

General: Protect base building fabric to the tenancy and to all public spaces including lifts and loading facilities. Make good all damage.

Ownership

General: If any base building items are removed by the tenant, they remain the property of the building owner. Arrange storage for future reinstallation.

2 EXECUTION

2.1 SERVICES INSTALLATION

Penetrations and fixing

General: If it is proposed to penetrate or fix to the following, submit details of the methods proposed to maintain the required structural integrity, fire performance, waterproofing performance and other properties:

- Structural building elements including external walls, fire walls, fire doors and access panels, other tested and rated assemblies or elements, floor slabs and beams.
- Membrane elements including damp-proof courses, waterproofing membranes and roof coverings. If penetrating membranes, provide a waterproof seal between the membrane and the penetrating component.

Fixing: If equipment is not suitable for fixing to non-structural building elements, fix directly to structure and trim around penetrations in non-structural elements.

Fire-resisting building elements: Seal penetrations with a system conforming to AS 4072.1 (2005).

Non fire-resisting building elements: Seal penetrations around conduits and sleeves. Seal around cables within sleeves. If the building element is acoustically rated, maintain the rating.

Sleeves: If piping, cables or conduits penetrate building elements, provide metal or PVC-U sleeves formed from oversize pipe sections.

2.2 COMPLETION

Project folder

General: Provide a project folder containing the following:

- Record drawings of works as built.
- Product data with maintenance and cleaning instructions.
- Product warranties to the following terms:
 - . Plasterboard: 5 years.
 - . Doors and door frames: 5 years.
 - . Glass and glazing: 10 years.
 - . Suspended ceilings: 10 years.
- Air conditioning record drawing of the existing system and the system as installed showing the adjusted air quantities as measured.
- Maintenance requirements for fire extinguishers and fire blankets to AS 1851 (2012).

0453 DOORS AND ACCESS PANELS

1 GENERAL

1.1 STANDARDS

General

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

2 PRODUCTS

2.1 FRAMES

Aluminium frames

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

Steel frames

Construction: Continuously welded from metallic-coated steel sheet sections, including accessories such as buffers, strike plates, spreaders, switch boxes, fixing ties or brackets, and provision for fixing documented hardware and electronic security assemblies.

Base metal thickness (minimum):

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

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

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.

2.2 DOORS

Materials

Standards: Conform to the following:

- Decorative laminated sheets: To AS/NZS 2924.1 (2024).
- 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 formaldehyde emissions: Class E₁ to AS/NZS 2270 (2006).
- Glass doors and glazed door panels: To AS 1288 (2021).

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

Door thickness:

- General: 35 mm.
- Doors over 900 mm wide: 40 mm.

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

Edge strips: Minimum thickness 10 mm. Increase overall thickness to greater than 15 mm to accommodate the full depth of the rebate in rebated doors.

Double doors

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

Double doors other than double acting doors: Provide rebated meeting stiles or fix equivalent metal T stop to one leaf. Form rebates to suit standard rebated hardware.

Fire-resisting doorsets

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

Smoke doorsets

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

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

3 EXECUTION

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.

Fixing centres: Maximum 600 mm.

Aluminium frames

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

Steel frames

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

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.

3.2 DOORS

Priming

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

Safety markings

Fully glazed doors: Apply safety markings at between 700 mm and 1200 mm from the floor to AS 1288 (2021) clause 5.19.

3.3 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 if 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.

0455 DOOR HARDWARE

1 PRODUCTS

1.1 KEYS

Materials and components

Key control system: Submit details of the proprietary key control security system proposed by the lock manufacturer for locks required to accept a group key (master, grandmaster).

1.2 LOCKS AND LATCHES

Mechanical locksets

Classification: To AS 4145.1 (2008).

1.3 HINGES

Butt hinge materials

Timber doors in steel frames: Steel, stainless steel or brass.

Aluminium framed doors in aluminium frames: Stainless steel or high tensile aluminium with fixed stainless steel

pins in nylon bushes and with nylon washers to each knuckle joint.

Doors fitted with closers: Provide low friction ball bearing hinges.

Fire-resisting doors: To AS 1905.1 (2015).

Power transfer hinges: Provide hinges that allow wires to be transferred unbroken between the door and frame.

Lift-off doors: If sanitary compartments require lift-off doors, provide lift-off hinges and allow for door panel with sufficient clearance at the head to allow door removal.

Timber solid core doors

Number of hinges: Determine the number of hinges required based on the nominated door leaf size and weight only. For other door leaf sizes or for doors with applied finishes use the weight of the door to determine the number of hinges required. For a door leaf over 80 kg, use pivot hinges.

Size of hinges: Determine the size of the hinge based on the door leaf thickness:

- 35 to 43 mm: 100 x 75 mm butt hinges with a minimum thickness of 2.5 mm.
- 44 to 55 mm: 100 x 100 mm butt hinges with a minimum thickness of 2.5 mm.

Wide throw: If necessary, provide wide throw hinges to achieve the required door swings in the presence of obstacles such as nibs, deep reveals and architraves.

Hinges for timber doors table

Nominal door leaf size (H x W x T) (mm)	Maximum door leaf weight (kg)	Number of hinges
2040 x 600 x 35	29	2
2040 x 720 x 35	35	3
2040 x 820 x 35	39	3
2040 x 920 x 35	44	3
2040 x 1020 x 40	52	4
2400 x 920 x 40	55	4
2400 x 1020 x 40	60	4
2400 x 1220 x 50	72	5
2040 x 920 x 70	88	Pivot hinges

Aluminium doors

Application: Aluminium hinges for aluminium doors, or for doors of other materials in aluminium frames 40 kg or less.

Hinges for aluminium doors table

Nominal hinge size LxWxT (mm)	Maximum door leaf weight (kg)	Knuckles (minimum)	Screws/hinge leaf (minimum)
100 x 70 x 3	30	3	3
100 x 80 x 3.5	50	5	4
130 x 50 x 3.4	75	Interfold	3

Sliding door track systems

Installation: To the manufacturer's product data sheet.

1.4 ANCILLARIES

Bolts

Double doors: Provide flush bolts, including lock plates, staples, ferrules or floor sockets.

Furniture

General: Provide lock and latch furniture suitable for use with the lock or latch to which it is installed with the corresponding level of performance.

Handles: NCC compliant.

Rebated doors

General: For mortice locks or latches to rebated doors, provide purpose-made rebated pattern items.

Strike plates

General: Use strike plates supplied with the locks or latches. Do not provide universal strike plates.

1.5 DOOR CONTROLLERS

Performance

Requirement: Door controllers, pivots, floor or overhead door closers and automatic door operators, which are suitable for the door type, size, weight and swings required and the operating conditions, including wind and air conditioning pressure.

Fire-resisting door closers

General: Closers tested and certified for use as components of fire-resisting door assemblies.

Standard: To AS 1905.1 (2015).

2 EXECUTION

2.1 INSTALLATION

Door hardware

Mounting heights: Mount locks and latches so that the centreline of the door knob or lever spindle is at a uniform height between 900 to 1100 mm above finished floor.

Lock cylinders: Fix vertically and with consistent key alignment.

Proprietary doorsets: Provide the standard hardware.

Door stops

Fixing: Fix on the floor, skirting or wall, as appropriate, to prevent the door or door furniture striking the wall or other surface.

Hinges

Metal frames: Fix hinges using metal thread screws. Do not weld hinges to frames.

Timber doorsets: Install butt hinges in housings equal in depth to the thickness of the hinge leaf (except for hinges designed for mounting without housing), and fix with countersunk screws.

2.2 COMPLETION

Adjustment

General: Leave the hardware properly adjusted with working parts in working order, and clean, undamaged, properly adjusted, and lubricated if appropriate.

Automatic door operators: Maintain and adjust the system throughout the defects liability period.

Keys

Contractor's keys: Immediately before practical completion, replace or reset cylinders to which the contractor has had key access during construction to exclude the contractor's keys.

0521 PARTITIONS - DEMOUNTABLE

1 GENERAL

1.1 TOLERANCES

General

Requirement: Conform to the **Tolerances table**.

Tolerances table

Property	Tolerance criteria
Deviation (from true grid lines and planes)	1:1000 to maximum 3 mm
Misalignment (of adjoining surfaces at panel junctions)	1 mm
Panel thickness	±0.5 mm
Length and width	0.1% of the dimension or 0.5 mm, whichever is the greater
Flatness, twist, winding and bow	1 mm deviation from a 2.4 m straightedge placed in any position
Maximum deviation of edges from the intended true line	±1 mm.

2 PRODUCTS

2.1 DEMOUNTABLE PARTITIONS

General

General: Proprietary non-load bearing demountable partition system, comprising solid and glazed panels, doors and door frames, and accessories to form a complete and finished partition system.

3 EXECUTION

3.1 PREPARATION

Substrate

General: Prepare the substrate to receive the partitions.
Carpet: Fix bottom tracks over polyethylene film.

Protection

General: Protect existing work from damage during the installation and rectify any damage. Provide temporary coverings if required.

Pre-conditioning

General: Acclimatise wood-based system components in the in-service conditions for a minimum period of two weeks before assembly.

Set-out

General: Set out the partition grid on the centreline of framing members, and to coincide with the ceiling grid and the building grid, as applicable.

3.2 INSTALLATION

Partition erection

General: Install demountable partitions to the manufacturer's recommendations and as follows:

- Plumb, level, on correct alignments and firmly fixed.
- Supported by fixing the top plate to the ceiling structure or slab soffit, or stabilised by lapping and fastening intersecting or butting plates together.
- With partition panels firmly butted to one another and to adjacent construction.

Building movements: Provide clearances or deflection heads so that partitions are not damaged by structural building movements including long-term slab deflection. If fire-resistance levels or acoustic ratings are required, provide a resilient foam or mastic seal having properties equal to those required for the partition.

Fixing

Concealed fixings: For demountable items, provide fixings capable of being repeatedly removed and replaced without damage to finishes.

Fixing to masonry: Provide masonry anchors of expansion or chemical grout type. Do not use explosive-driven fastenings.

Fixing to suspended ceilings: Provide top support to the partition without damage to the ceiling components.

Splicing

General: Splice plates at ends to maintain continuity and alignment.

Sound transmission

General: Seal flanking sound transmission paths during installation, including junctions between partition panels and between panels and other building surfaces, air gaps around doorsets, recesses, such as pelmets and blind boxes, and at cut-outs for services to preserve the sound reduction properties of partitions. Avoid cut-outs back-to-back or next to each other.

Plenum baffles: Fix a mass loaded vinyl sheet barrier in the ceiling space above acoustic rated partitions. Fix to soffit through a continuous furring channel, hang to meet the top of the partition, and extend it horizontally 900 mm over the ceiling.

Sealing methods: Use appropriate sealing methods, including purpose-made solid profiled inserts, durable resilient gaskets or closed cell foam strips. Provide solid resilient materials in preference to foamed or fluid applied materials, if possible.

Services access

General: Conceal reticulation of associated building services, either within cavities in the partition structure, or within ducted skirtings supplied as part of the partition system, or both. Provide removable or demountable components of the partition system for access to services concealed within partition cavities.

0522 PARTITIONS - FRAMED AND LINED

1 GENERAL

1.1 TOLERANCES

General

Finished framing: To AS/NZS 2589 (2017) clause 4.2.2.

2 PRODUCTS

2.1 FRAMING

Light steel framing

General: Proprietary framing system of metallic-coated folded steel strip lipped studs and channel section top and bottom tracks and noggings.

Sections and members: To AS/NZS 4600 (2018).

2.2 LINING

Plasterboard

Standard: To AS/NZS 2588 (2018).

Accessories and trim

General: Accessories and trim necessary to complete the installation.

Adhesives

General: Adhesives of types appropriate to their purpose and substrates, applied to transmit the loads imposed without causing discolouration of finished surfaces.

Sealants

Acoustic sealant: Non-hardening sealant compatible with the materials to be sealed.

Sealant strips: Closed cell resilient foam.

2.3 INSULATION

Bulk acoustic insulation

Mineral wool or polyester blankets or batts: Proprietary acoustic insulation systems selected to fulfil the acoustic requirements.

Flexible sheet insulation: Proprietary mass loaded vinyl sheet selected to fulfil the acoustic requirements.

3 EXECUTION

3.1 PREPARATION

Substrate

General: Prepare the substrate to receive the partitions.

Carpet: Fix bottom tracks over polyethylene film.

Protection

General: Protect existing work from damage during the installation and rectify any damage. Provide temporary coverings if required.

Pre-conditioning

General: Acclimatise wood-based system components in the in-service conditions for a minimum period of two weeks before assembly.

Set-out

General: Set out the partition grid on the centreline of framing members and to coincide with the ceiling grid and other major building grid, as applicable.

3.2 INSTALLATION

Partition erection

General: Install partitions plumb, level, on their correct alignment and firmly fixed.

Building movements: Provide clearances or deflection heads so that partitions are not damaged by structural building movements including long term slab deflection. If fire-resistance levels or acoustic ratings are required, provide a resilient foam or mastic seal with properties equal to those required for the partition.

Structural floor control joints

General: Do not run or fix partition framing across control joints.

Acoustic rated partitions

General: Isolate the frames from floors, ceilings and vertical abutments with beads of non-hardening sealant compatible with the materials to be sealed.

Trim

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

3.3 LIGHT STEEL FRAMES

Tracks

General: Conform to the following:

- Fix bottom tracks to floor substrate.
- Fix top wall tracks to suspended ceiling grid.
- Fix deflection head tracks to the structural soffit above.

Fixing to masonry: Provide masonry anchors of expansion or chemical grout type. Do not use explosive-driven fastenings.

Track fixing: Fix top and bottom tracks at 600 mm maximum centres, and 100 mm from ends. Splice plates at ends to maintain continuity and alignment.

Stud framing

General: Provide studs in single lengths without splices. Rotate intermediate studs into tracks for friction fixing.

Screw fix jamb studs, corner studs and wall intersection studs to tracks.

Fixing: Fix noggings at 1350 mm maximum centres vertically and as required for skirtings and wet area lining.

Lintels: Install a stiffened top plate lintel for spans of 1800 mm or greater.

Curved partitions

Tracks: Provide a proprietary curved track system.

Stud spacing: Conform to the sheeting manufacturer's recommendations for curved partitions.

Jambs

General: Install boxed double studs at jambs to all openings.

Additional frame support

General: Provide frame support for fixing the following:

- Floor and wall mounted fixed joinery units, furniture and equipment.
- All grabrails and handrails.

Stud stiffening: Provide stud stiffening to support wall-hung joinery units and equipment with:

- Full height close fitting timber inserts.
- Boxed steel lipped studs.

Stud service holes

General: Use factory pre-cut flared holes, or provide site cut holes punched or drilled on the centreline of the member and fit proprietary plastic bushes or grommets. Splice additional stiffening to studs if site cut service holes exceed 1/3 the depth of the member.

Earthing

Permanent earthing: Required.

Temporary earthing: Provide temporary earthing during erection until the permanent earthing is installed.

3.4 PLASTERBOARD LINING

Installation

Gypsum plasterboard and fibre-reinforced gypsum lining: To AS/NZS 2589 (2017).

Multiple sheet layers

Application: Fire-resisting and acoustic rated partitions.

Joints: Fill and flush up all joints and fixings in each layer and caulk up perimeters and penetrations before installing following layers. Stagger all sheet joints minimum 200 mm.

Joints and joint treatment

General: Install joint accessories in conformance with manufacturer's recommendations. Install plumb, level and true to line.

Flush joints: Use joint reinforcing tape bedded in joint compound with recessed edge sheets and finish flush.

Butt joints: Make joints over framing members or otherwise provide back blocking.

External corner joints: Bed purpose fabricated perforated metallic-coated steel corner beads in joint compound.

Ceiling junctions: Install purpose fabricated perforated metallic-coated steel trim to top of partition.

Sheet metal partition end caps: Provide purpose fabricated perforated metallic-coated steel end caps, sized for partition thickness and bedded in joint compound.

MDF end caps: Provide recessed edge sheets and finish flush using joint reinforcing tape and joint compound.

Dry joints: Use square edged sheet and finish with a PVC-U joining section.

Control joints: Provide purpose-made perforated metallic-coated control joint beads at not more than 12 m

centres in partitions and to coincide with structural control joints. Bed in joint compound.

Wet areas: Provide additional supports, flashings, trim and sealants to manufacturer's recommendations.

Joints in tiled areas: Bed reinforcing tape in joint compound. Do not apply a topping coat.

3.5 FLANKING SOUND INSULATION

Sound transmission

General: Seal flanking sound transmission paths during installation, including junctions between partitions and other building surfaces, air gaps around doorsets, recesses, such as pelmets and blind boxes and cut-outs for services to preserve the sound reduction properties of partitions.

Plenum baffles

Bulk insulation: Install individual layers to fill space between building structure and the top of the partition or the top of the suspended ceiling.

Flexible sheet insulation: Fix a sheet barrier in the ceiling space above acoustic rated partitions. Fix to soffit through a continuous furring channel, hang to meet the top of the partition and extend horizontally 900 mm over the ceiling.

Cable management

Power outlets: Do not install general purpose socket-outlets back to back. Separate adjoining outlets with a continuous layer of the documented wall insulating material.

Ducted skirtings: If a ducted skirting extends continuously across an abutment, pack the cavities firmly with bulk acoustic insulating material for 300 mm each side of the abutment, and scribe and seal the joint.

0524 PARTITIONS - GLAZED

1 PRODUCTS

1.1 GLAZED PARTITIONS

General

System: Proprietary non-load bearing glazed partition suite comprising main frames, door frames, sills, ceiling channels and other extrusions and accessories to form a complete and finished system.

Frames

Aluminium extrusions: To AS 1866 (1997).

Sealants

General: Sealant types appropriate for the partition's acoustic rating and compatible with partition materials and building substrate.

1.2 GLASS

Standards

Glass type and thickness: To AS 1288 (2021).

Materials and installation: To AS 1288 (2021).

Quality requirements for cut-to-size and processed glass: To AS/NZS 4667 (2000).

Terminology for work on glass: To AS/NZS 4668 (2000).

Performance

Glass: Free from defects that detract from appearance or interfere with performance under normal conditions of use.

Safety glazing materials

Standard: To AS 2208 (2023).

Type: Grade A.

Marking: To AS 1288 (2021) clause 5.23.

1.3 GLAZING MATERIALS

General

Requirement: Putty, glazing compounds, sealants, gaskets, glazing tapes, spacing strips, spacing tapes, spacers, setting blocks, shims and compression wedges appropriate for the conditions of application and required performance.

Jointing materials

General: Jointing and pointing materials that are compatible with each other and with the contact surfaces and non-staining to finished surfaces. Do not provide bituminous materials on absorbent surfaces.

2 EXECUTION

2.1 GENERAL

Preparation

General: Prepare the substrate to receive the partitions.

Carpet: Fix bottom tracks over polyethylene film.

Protection

General: Protect existing work from damage during the installation and rectify any damage. Provide temporary coverings if required.

Set-out

General: Set out the partition grid on the centreline of framing members, and to coincide with the ceiling grid and other major building grid, as applicable.

2.2 INSTALLATION

General

Requirement: Conform to manufacturer's recommendations and assembly details.

Frame erection

General: Install main frames, sills, ceiling channels, door and window frames and other framing members as follows:

- Plumb, level, square, straight and true.
- Fixed or anchored to the building structure.
- Isolated from any building loads, including loads caused by structural deflection or shortening.
- Joints tightly fitted and neatly aligned.
- Door and window openings accurately sized.
- Use concealed fixings.

2.3 PARTITION GLAZING

Glass processing

Processing: Perform required processes on glass, including cutting, obscuring, silvering and bending. Form necessary holes, including for fixings, hardware, equipment, access openings and speaking holes. Process exposed glass edges to a finish not inferior to ground arised.

Framed glazing

Assembly: Provide proprietary glazing beads and resilient (PVC, butyl or similar) glazing tapes, gaskets and inserts, to hold the glass firmly without distortion and to withstand the required loadings.

Frameless glazing

Assembly: Join the vertical edges of adjacent glass panels with a clear structural silicone jointing compound.

Safety markings

Full height glass partitions: To AS 1288 (2021) clause 5.19.

2.4 COMPLETION**Cleaning**

General: Remove protective coverings, replace damaged glass and leave the work clean, polished, free from defects and in good condition.

0527 ROOM DIVIDERS**1 EXECUTION****1.1 INSTALLATION****General**

Requirement: Fabricate and install room dividers to substrates undamaged, plumb, level, straight and free of distortion and to the **Tolerances table**.

Support: Make sure the brackets and fixings supporting the head track from the base building framing or slab soffit are structurally adequate.

Tolerances table

Property	Tolerance criteria
Deviation (from true grid lines and planes)	1:1000 to maximum 3 mm
Misalignment (of adjoining surfaces at panel junctions)	1 mm
Panel thickness	±0.5 mm
Length and width	0.1% of the dimension or 0.5 mm, whichever is the greater
Flatness, twist, winding and bow	1 mm deviation from a 2.4 m straightedge placed in any position
Maximum deviation of edges from the intended true line	±1 mm.

0530 SUSPENDED CEILINGS**2 PRODUCTS****2.1 SUSPENSION SYSTEM****Alterations**

General: Dismantle and re-use ceiling suspension system members and supplement with compatible new members as required.

2.2 CEILING TILES**Tiles**

General: Re-use existing tiles and supplement them with new ceiling tiles to suit the suspension system as required.

0551 JOINERY**1 GENERAL****1.1 TOLERANCES****General**

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

Tolerances table

Property	Tolerance criteria
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

2 PRODUCTS**2.1 JOINERY ASSEMBLIES****Certification**

Branding: Label panels under the authority of a recognised certification scheme applicable to the product. Locate the brand on faces or edges that will be concealed in the works.

Plywood formaldehyde emission class to AS/NZS 2270 (2006): E₁.

Particleboard formaldehyde emission class to AS 1859.1 (2017): E₁.

Dry process fibreboard formaldehyde emission class to AS/NZS 1859.2 (2017): E₁.

Delivery

Large items: Provide for the break-up and re-assembly of large items as required for delivery to their final location. Make sure joints are appropriate to the level of finish.

Drawer and door hardware

Hinge types: Concealed metal hinges with the following features:

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

Piano hinges: Chromium-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.

0573 FIRE EXTINGUISHERS AND BLANKETS**1 PRODUCTS****1.1 AUTHORISED PRODUCTS****Compliance**

Requirement: Provide equipment suitable for use to NCC (2022) A5G1.

1.2 EXTINGUISHERS**Portable fire extinguishers**

General: To AS/NZS 1841.1 (2007).

Type:

- Water: To AS/NZS 1841.2 (2007).
- Wet chemical: To AS/NZS 1841.3 (2007).
- Foam: To AS/NZS 1841.4 (2007).
- Powder: To AS/NZS 1841.5 (2007).

- Carbon dioxide: To AS/NZS 1841.6 (2007).
 - Non-rechargeable: To AS/NZS 1841.8 (2007).
- Selection, location and distribution: To AS 2444 (2001).

1.3 BLANKETS

Fire blankets

General: To AS/NZS 3504 (2006).

Selection and location: To AS 2444 (2001).

0650 FLOOR FINISHES

1 PRODUCTS

1.1 GENERAL

Protection

Requirement: Protect existing floor finishes with polyethylene film.

Replacement

Requirement: Provide new floor finishes as follows:

- To match existing finish.
- To form an unobtrusive interface with existing finish.

0671 PAINTING

1 GENERAL

1.1 RESPONSIBILITIES

General

Requirement: Provide coating systems to substrates as follows:

- Consistent in colour, gloss level, texture and dry film thickness.
- Free of runs, sags, blisters, or other discontinuities.
- Opaque paint finishes that are fully opaque.
- Clear finishes at the level of transparency consistent with the product.
- Fully adhered.
- Resistant to environmental degradation within the manufacturer's stated life span.

1.2 STANDARDS

Painting

General: To the recommendations of the relevant parts of AS/NZS 2311 (2017).

2 PRODUCTS

2.1 PAINTING MATERIALS

Delivery

General: Deliver paints to the site in the manufacturer's labelled and unopened containers.

Low VOC emitting paints

VOC limits for low odour/low environmental impact paint types:

- Primers, sealers and undercoats: < 65 g/L.
- Interior wall and ceiling paints, all sheen levels: < 16 g/L.
- Varnishes and wood stains: < 75 g/L.

Combinations

General: Do not combine products from different manufacturers in a paint system.

Clear timber finish systems: Provide only the combinations of putty, stain and sealer recommended by the manufacturer of the topcoat.

Putty and fillers

Material: To the recommendations of the paint system manufacturer, suitable for the substrate and compatible with the primer.

Tinting

General: Provide only products that are colour tinted by the manufacturer or supplier.

3 EXECUTION

3.1 PREPARATION

Order of work

Other trades: Complete the work of other trades as far as practicable within the area to be painted, except for the installation of fittings and laying flooring materials.

Clear finishes: Complete clear timber finishes before applying opaque paint finishes in the same area.

Protection

General: Clean the area and protect from dust contamination. Use drop sheets and masking agents to protect surfaces, including finished surfaces and adjacent finishes during painting.

Fittings and furniture: Remove door furniture, switch plates, light fittings and other fittings. Attach labels or mark fittings using a non-permanent method, identifying location and refixing instructions, if required. Store and protect against damage. Refix in position on completion of painting.

Substrates

General: Prepare substrates to receive the documented paint systems to the manufacturer's recommendations and as follows:

- Generally: Clean the substrate surface without damaging the substrate or the surroundings.
- Timber surfaces where clear finishes will be applied: Prepare the surface so that its attributes will show through the clear finish without blemishes including the following:
 - Remove bruises.
 - Remove discolourations, including staining by oil, grease and nailheads.
 - Bleach if necessary to match the timber colour sample.
 - Fine sanding, with the last abrasive no coarser than 220 grit, so that there are no scratches across the grain.

Filling: Conform to the following:

- Generally: Fill cracks and holes with fillers, sealants, putties or grouting cements as appropriate for the finishing system and substrate, and sand smooth.
- Timber surfaces where clear finishes will be applied: Provide filler or putty tinted to match the surface.

Substrate moisture content

Requirement: Use a moisture meter to demonstrate that the moisture content of the substrate is at or below the recommended maximum level for the type of paint and the substrate material.

Unpainted surfaces

General: To AS/NZS 2311 (2017) Section 3.

Previously painted surfaces

Preparation of a substrate in good condition: To AS/NZS 2311 (2017) clause 7.4.

Preparation of a substrate in poor condition: To AS/NZS 2311 (2017) clause 7.5.

3.2 PAINTING

General

Standard: To AS/NZS 2311 (2017) Section 6.

Timing: Apply the first coat immediately after substrate preparation and before contamination of the substrate can occur. Apply subsequent coats after the manufacturer's recommended drying period has elapsed.

Light levels

General: During preparation of the surfaces, painting and inspection, maintain light levels ≥ 400 lux.

Spraying

General: If the application is by spraying, use conventional or airless equipment that conforms to the following:

- Satisfactorily atomises coating being applied.
- Does not require coating to be thinned beyond the maximum amount recommended by the manufacturer.
- Does not introduce oil, water or other contaminants into the applied coating.

Paint with known health hazards: Not permitted on site.

Sanding

Clear finishes: Sand the sealer using abrasives no coarser than 320 grit without cutting through the colour. Take special care with round surfaces and edges.

Repair

Requirement: Clean off marks, paint spots and stains progressively and restore damaged surfaces to their original condition. Touch up damaged decorative paintwork or misses only with the paint batch used in the original application.

Services

General: Paint new services and equipment if not embedded, including in plant rooms, except chromium, anodised aluminium, GRP, PVC-U, stainless steel, non-metallic flexible materials and normally lubricated machined surfaces. Repaint proprietary items only if damaged.

Wet paint warning

Notices: Place notices in a conspicuous location and do not remove until the paint is dry.

0702 MECHANICAL DESIGN AND INSTALL

1 GENERAL

1.1 RESPONSIBILITIES

General

Requirement: Modify and extend the existing air conditioning and mechanical ventilation system to suit the partition layout.

Existing air quantities: Before starting work measure the existing air quantities and report on any discrepancies between the measured and documented values. Subject to the results, maintain the total air quantity shown in the existing installation documents.

Design

Existing installation: Refer to the existing installation documents for details of the existing building and mechanical services installation, design values and performance allowances. Obtain any other information relating to the existing systems by inspection and/or measurement on the site.

Temperature variation: Limit the temperature difference in air conditioned spaces served by the same zone or system to 2°C between any 2 points in the space from floor level to 1500 mm above floor level, with the temperature measured in the same 5 minute period.

Grilles and diffusers: Size and locate diffusers to provide even air distribution and temperatures without draughts. Provide at least one grille or diffuser in each air conditioned room and at least one per 12 m² in rooms over 20 m². Allocate existing air quantities appropriate to the calculated loads and adjust air quantities on completion to agree with these values within +10%, -0%.

Zoning: Relocate existing temperature sensors if necessary to correctly sense the average temperature in the respective zone.

- Submissions: Review the existing, and recommend alterations to, the duct, diffuser and temperature sensor layout. Maintain the integrity of the zoning.

Ductwork: Size flexible duct for ≤ 4.0 m/s.

Grilles and diffusers

General: If additional diffusers and grilles are required, provide new, identical to the existing.

Door grilles: Full chevron, 50% minimum free area. Frame to suit door thickness.

0802 HYDRAULIC DESIGN AND INSTALL

1 GENERAL

1.1 RESPONSIBILITIES

General

General: Provide complete hydraulic services systems to meet site and other constraints. Make submissions including notices to authorities relating to the works.

1.2 STANDARDS

General

Plumbing and drainage: To the AS/NZS 3500 series.

Design for access and mobility: To the NCC cited AS 1428.1 (2009) and AS 1428.2 (1992).

2 PRODUCTS

2.1 GENERAL

Authorised products

Requirement: Provide only products listed in the WaterMark Product Database, unless otherwise required by the Network Utility Operator.

Labelling

Water efficiency labelling: Provide only products conforming to and labelled to the Water Efficiency Labelling Scheme (WELS).

3 EXECUTION

3.1 INSTALLATION

Appliances

General: Provide cold water, heated water and sanitary plumbing to nominated appliances including, but not limited to, dishwashers, boiling water units, hot water heaters, water filters and water coolers.

Accessories

General: Provide the accessories and fittings necessary for the proper functioning of the systems, including taps, valves, outlets, pressure, strainers, temperature and pulsation control devices.

Arrangement

Services and equipment: Locate and arrange so that:

- Failure of plant and equipment, including leaks, does not create a hazard for the building occupants and causes minimum or no damage to the building, its finishes and contents.
- Inspection and maintenance operations can be carried out in a safe and efficient manner, with minimum inconvenience and disruption to building occupants and without damaging adjacent structures, fixtures or finishes. In addition to valves required to meet statutory requirements, provide isolating valves necessary to achieve this.

Other occupants: Arrange the work to minimise impact on other tenancies.

Piping

General: Install piping in straight lines, plumb and to uniform grades. Arrange and support the piping so that it remains free from vibration and water hammer, while permitting movement in both structure and services. Keep the number of joints to a minimum. Prevent direct contact between incompatible metals.

Concealment: If practicable, conceal piping and fittings requiring maintenance or servicing so that they are accessible within non-habitable enclosed spaces such as roof spaces, subfloor spaces and ducts.

Cover plates: Where exposed piping emerges from wall, floor or ceiling finishes, provide cover plates of stainless steel or non-ferrous metal finished to match the piping.

Finishes

General: Finish exposed piping, including fittings and supports, as follows:

- In internal locations such as toilet and kitchen areas: Chrome-plated copper piping to AS 1192 (2004) service condition 2, bright.
- Externally and steel piping and iron fittings internally: Paint.
- In concealed but accessible spaces, including cupboards and non-habitable enclosed spaces: Leave copper and plastic unpainted except for identification marking. Prime steel piping and iron fittings.

Valves: Finish valves to match connected piping.

3.2 COLD AND HEATED WATER SERVICES

Fittings and accessories

General: Provide the fittings necessary for the proper functioning of the water supply system, including taps, valves, backflow prevention devices, pressure and temperature control devices, strainers, gauges and automatic controls and alarms.

Heated water temperature

Standard: To AS/NZS 3500.4 (2021).

Tapware

General: Provide water efficient tapware.

Metal heads and handles: Provide brass fittings or a suitable bush to prevent electrolysis and growth.

Plastic heads and handles: Provide compact fittings designed to prevent fracture and exposure of jagged or rough edges.

3.3 SANITARY PLUMBING

Sanitary fixtures

Accessories: Provide sanitary fixtures documented complete with all accessories necessary for correct installation and use.

0902 ELECTRICAL DESIGN AND INSTALL

1 GENERAL

1.1 RESPONSIBILITIES

Qualification

General: Use only appropriately experienced and qualified persons to undertake the electrical design work on the systems documented.

Performance

General: Carry out verification tests and measurements to show compliance with the specification.

1.2 STANDARDS

General

Electrical systems: To AS/NZS 3000 (2018).

Degrees of protection (IP code): To AS 60529 (2004).

Electromagnetic capability (EMC): To the AS/NZS 61000 series.

Communications systems: To AS/CA S008 (2020), AS/CA S009 (2020), AS 11801.1 (2019) and AS/NZS 14763.2 (2020).

2 EXECUTION

2.1 GENERAL

Location

Arrangement: Arrange services so that services running together are parallel with each other and with adjacent building elements.

Installation: Install equipment and services plumb, fix securely and organise reticulated services neatly. Allow for movement in both structure and services.

2.2 INSTALLATION OF ACCESSORIES

General

Accessories: Install accessories in conformance with the **Installation of accessories table**.

Flush mounting: Provide flush mounted accessories.

Location: Confirm the final location of all outlets and equipment on site, before installation.

Default mounting heights to centre of accessory plate:

- Outlets not on skirting duct: 300 mm.
- Switches and controls: 1100 mm.

Restricted location: Do not install wall boxes across junctions of wall finishes.

Installation of accessories table

Wall construction	Installation and concealed cabling facilities
Rendered masonry partition	Flush wall box with conduit chased into wall
Face brick external cavity wall	Flush wall box with thermoplastic insulated cables in conduit run in cavity and tied against inner brick surface, or thermoplastic sheathed cables run in cavity
Stud partition	Flush plate secured to proprietary support bracket or wall box

Installation of ceiling mounted appliances

Connections for appliances: Provide flush mounted outlets on the ceiling next to support brackets.

Connections for fixed equipment: Provide concealed permanent connections.

Fixing: Provide support brackets fixed through ceiling to the building structure. Brace appliances that have excessive bending moments, are heavy or vibrate, to prevent horizontal movement.

2.3 LOW VOLTAGE POWER SYSTEMS

General

Requirement: Provide final subcircuits to all power and lighting loads.

Submissions

Technical data: Submit documentation to fully describe the proposed installation. As a minimum, submit the following:

- Single line diagram(s).
- Maximum demand calculations.
- Certification of conformance with AS/NZS 3000 (2018) for electrical services.

Accessories

General: Provide and, as necessary, relocate the following:

- General purpose socket-outlets.
- Isolating switches.

Wiring systems

Standard: To AS/NZS 3013 (2005).

Thermal insulation: In walls filled with thermal insulation, install cables in PVC-U conduit.

Power cables

General: Copper cable generally, multi-stranded.

Minimum size:

- Lighting subcircuits: 1.5 mm².
- Power subcircuits: 2.5 mm².

Fault loop impedance: Provide final subcircuit cables selected to satisfy the requirements for automatic disconnection under short-circuit and earth fault/touch voltage conditions.

2.4 SWITCHBOARD COMPONENTS

Protective devices

Requirement: Provide protective devices which grade and coordinate for overcurrent, let through energy, and earth faults, as necessary.

Moulded case and miniature circuit breakers

Fault capacity ≥ 10 kA: To AS/NZS 60947.1 (2021) and AS/NZS IEC 60947.2 (2015).

Fault capacity < 10 kA, current rating < 125 A: Miniature overcurrent circuit breakers to AS/NZS 60898.1 (2024) and AS/NZS 3111 (2009).

Residual current operated circuit breakers (RCBO)

Integral type: Incorporate earth leakage in circuit breaker protection operation to AS/NZS 61009.1 (2015).

Maximum tripping current: 30 mA.

Surge protection devices (SPDs)

Requirement:

- Main switchboard or main distribution board: Provide shunt connected metal oxide varistors on the load side of the incoming main protection switch.
- Each subcircuit with electronic equipment connected: Provide a series connected surge filter comprising metal oxide varistor, a low pass LC filter and secondary metal oxide varistor SPD.

Type: Type II SPD.

Standards:

- Ratings: To AS 1768 (2021) Section 4.
- Installation: To AS 1768 (2021) Appendix F and AS/NZS 3000 (2018) Appendix F.

Contactors

Standard: To AS/NZS IEC 60947.4.1 (2015).

Rated operational current: Full load current of the load controlled.

Minimum rating: 16 A.

2.5 LIGHTING

General

Requirement: Relocate and extend existing lighting to suit the new partition layout. Provide new lighting as required to suit special functional requirements.

Interior lighting standards: To AS/NZS 1680.1 (2006), AS/NZS 1680.2.1 (2008), AS/NZS 1680.2.2 (2008) and AS/NZS 1680.3 (2017).

Proprietary equipment: Provide only proprietary luminaires, fittings and accessories.

Modifications and refurbishing: Carry out to the original manufacturer's standards.

Minimum energy performance standards

General: To AS 4782.2 (2019) and AS/NZS 4783.2 (2002).

Lamps

Requirement: Provide all luminaires complete with lamps and accessories.

Existing luminaires: Replace all lamps.

Standards: Fluorescent lighting to AS/NZS 4782.1 (2020) and AS 4782.2 (2019).

Colour rendering: Group 1B to AS/NZS 1680.1 (2006).

Colour corrected temperature: 4000°K.

Low voltage lamps: Provide lamps in conformance with the luminaire manufacturer's recommendation.

Light-emitting diode (LED) luminaires: Provide complete with control gear.

Verification: Install lamps in all luminaires and verify correct operation before completion.

Lighting control system

General: Provide the following:

- Lighting switches to individual spaces.
- Dimmers compatible with the lighting control system to nominated areas.

Installation

Supports: Mount luminaires on proprietary supports including battens, trims, noggings, roses or packing material to suit location.

Recessed luminaires: Connect to plug socket outlets.

2.6 TELECOMMUNICATIONS CABLING

General

Requirement: Provide a complete operational tenancy telecommunications passive cabling system, tested and commissioned in conformance with AS 11801.1 (2019) and AS/CA S009 (2020). Provide accommodation for telecommunications cabling infrastructure conforming to AS/NZS 3084 (2017). Include the following:

- Network connection including cross connect patch
- Tenancy distributor.
- Horizontal cabling.
- Telecommunications outlets.

System requirements

Application class: To AS 11801.1 (2019) clause 6.3.1 Class E_A (500 MHz).

Balanced cabling system: To AS 11801.1 (2019) clause 8.2 Category 6A, clauses 6.3, 7.2 and 9.3, AS 11801.2 (2019) and AS 11801.4 (2019).

Balanced cabling system components: To AS 11801.1 (2019) clause 8.2.1 (data/voice) Category 6A AS 11801.2 (2019) and AS 11801.4 (2019).

Optical fibre cabling system: To AS 11801.1 (2019) clause 8.3.

Conformance: Certify the design and installation for conformance with AS 11801.1 (2019) Section 4.

System warranty: Warrant the specified communications equipment and cabling channel performance for a minimum of 15 years.

Equipment racks

Type: 19 inch rack.

Free standing racks: Provide adjustable feet.

Modular connector patch panels

Terminations: Terminate fixed wiring directly to the modular connector.

Patch cords: Terminate cord ends with appropriate registered jacks.

Patch cords

General: Provide terminated patch cords for 100% of the total incoming and outgoing ports used.

Cable separation

Low voltage cables: Separate telecommunications cables not enclosed in conduits or ducts from low voltage services by at least 150 mm.

Electromagnetic interference (EMI): Provide clearance to minimise the effect of EMI where communications cables are installed parallel and adjacent to power cables carrying loads in excess of 200 A.

Installation

Crossover: Install cables neatly.

Loom size: Loom cables into groups not exceeding 24 cables. Hold looms in place using re-usable cable ties at least 20 mm wide. Do not exert compressive force on the cables when installing cable straps.

Telecommunications outlets

Outlets: Provide RJ45 8 way modular jacks except if documented otherwise.

2.7 EMERGENCY EVACUATION LIGHTING

General

Requirement: Relocate and extend the existing emergency evacuation lighting system to meet the requirements of the NCC. Test and commission in conformance with the AS/NZS 2293 series.

Single point system luminaires

Visual indicator lights: Provide a red indicator, readily visible when the luminaire is in its operating location, which indicates that the battery is being charged.

Inverter system: Provide protection of the inverter system against damage in the event of failure, removal or replacement of the lamp, while in normal operation.

Local test switches: Provide a momentary action test switch, accessible from below the ceiling, on each luminaire to temporarily disconnect the mains supply and connect the battery to the lamp.

Common test switches: Provide a common test switch on the distribution board that disconnects the main supply to the luminaires and tests for discharge performance and automatically reverts to normal operating mode after testing.

Power supply to single point systems

General: Provide an unswitched active supply to each luminaire and exit sign, originating from the test switch control panel.

1033 SPRINKLERS

1 GENERAL

1.1 RESPONSIBILITIES

General

Requirement: Modify the existing automatic fire sprinklers installation, provide additional sprinklers and remove redundant sprinklers to suit the partition layout.

Standards

General requirements: To AS 2118.1 (2017).

Minor modifications: To AS 2118.8 (1997).

Submissions

Approval documentation: Submit drawings showing the proposed work to AS 2118.1 (2017) Appendix G.

Certification: Submit installer's completion certificates before practical completion.

REFERENCED DOCUMENTS

AS/CA S008	2020	Requirements for customer cabling products
AS/CA S009	2020	Installation requirements for customer cabling (Wiring Rules)
AS 1192	2004	Electroplated coatings - Nickel and chromium
AS 1288	2021	Glass in buildings - Selection and installation
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 1428.2	1992	Enhanced and additional requirements - Buildings and facilities
AS/NZS 1680		Interior and workplace lighting
AS/NZS 1680.1	2006	General principles and recommendations
AS/NZS 1680.2.1	2008	Specific applications - Circulation spaces and other general areas
AS/NZS 1680.2.2	2008	Specific applications - Office and screen-based tasks
AS/NZS 1680.3	2017	Measurement, calculation and presentation of photometric data
AS 1768	2021	Lightning protection
AS/NZS 1841		Portable fire extinguishers
AS/NZS 1841.1	2007	General requirements
AS/NZS 1841.2	2007	Specific requirements for water type extinguishers
AS/NZS 1841.3	2007	Specific requirements for wet chemical type extinguishers
AS/NZS 1841.4	2007	Specific requirements for foam type extinguishers
AS/NZS 1841.5	2007	Specific requirements for powder type extinguishers
AS/NZS 1841.6	2007	Specific requirements for carbon dioxide type extinguishers
AS/NZS 1841.8	2007	Specific requirements for non-rechargeable type extinguishers
AS 1851	2012	Routine service of fire protection systems and equipment
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 1866	1997	Aluminium and aluminium alloys - Extruded rod, bar, solid and hollow shapes
AS 1905		Components for the protection of openings in fire-resistant walls
AS 1905.1	2015	Fire-resistant doorsets
AS 2118		Automatic fire sprinkler systems
AS 2118.1	2017	General systems
AS 2118.8	1997	Minor modifications
AS 2208	2023	Safety glazing materials in buildings
AS/NZS 2270	2006	Plywood and blockboard for interior use
AS/NZS 2293		Emergency lighting and exit signs for buildings
AS/NZS 2311	2017	Guide to the painting of buildings
AS 2444	2001	Portable fire extinguishers and fire blankets - Selection and location
AS/NZS 2588	2018	Gypsum plasterboard
AS/NZS 2589	2017	Gypsum linings - Application and finishing
AS 2688	2017	Timber and composite doors
AS/NZS 2924		High pressure decorative laminates (HPL, HPDL) - Sheets based on thermosetting resins (usually called laminates)
AS/NZS 2924.1	2024	Introduction and general information (ISO 4586-1:2018, IDT)
AS/NZS 3000	2018	Electrical installations (known as the Australian/New Zealand Wiring Rules)
AS/NZS 3013	2005	Electrical installations - Classification of the fire and mechanical performance of wiring system elements
AS/NZS 3084	2017	Telecommunications installations - Telecommunications pathways and spaces for commercial buildings
AS/NZS 3111	2009	Approval and test specification - Miniature overcurrent circuit-breakers
AS/NZS 3500		Plumbing and drainage
AS/NZS 3500.4	2021	Heated water services
AS/NZS 3504	2006	Fire blankets
AS 4072		Components for the protection of openings in fire-resistant separating elements
AS 4072.1	2005	Service penetrations and control joints
AS 4145		Locksets and hardware for doors and windows
AS 4145.1	2008	Glossary of terms and rating system
AS/NZS 4600	2018	Cold-formed steel structures
AS/NZS 4667	2000	Quality requirements for cut-to-size and processed glass
AS/NZS 4668	2000	Glossary of terms used in the glass and glazing industry
AS/NZS 4782		Double-capped fluorescent lamps - Performance specifications
AS/NZS 4782.1	2020	General (IEC 60081:1997+AMD1:2000 CSV (ED.5.1), MOD)
AS 4782.2	2019	Minimum Energy Performance Standard (MEPS)
AS/NZS 4783		Performance of electrical lighting equipment - Ballasts for fluorescent lamps
AS/NZS 4783.2	2002	Energy labelling and minimum energy performance standards requirements
AS 6905	2007	Smoke doors
AS 11801		Information technology - Generic cabling for customer premises

AS 11801.1	2019	General requirements (ISO/IEC 11801-1:2017, MOD)
AS 11801.2	2019	Office premises (ISO/IEC 11801-2:2017, MOD)
AS 11801.4	2019	Single-tenant homes (ISO/IEC 11801-4:2017, MOD)
AS/NZS 14763		Information technology - Implementation and operation of customer premises cabling
AS/NZS 14763.2	2020	Planning and installation (ISO/IEC 14763-2 (ED. 2.0) MOD)
AS 60529	2004	Degrees of protection provided by enclosures (IP Code)
AS/NZS 60898		Electrical accessories - Circuit-breakers for overcurrent protection for household and similar installations
AS/NZS 60898.1	2024	Circuit-breakers for a.c. operation (IEC 60898-1:2015 (ED.2.1) MOD)
AS/NZS IEC 60947		Low voltage switchgear and controlgear
AS/NZS 60947.1	2021	General rules (IEC 60947-1:2020 (ED. 6.0) MOD)
AS/NZS IEC 60947.2	2015	Circuit-breakers
AS/NZS IEC 60947.4.1	2015	Contactors and motor-starters - Electromechanical contactors and motor-starters
AS/NZS 61000		Electromagnetic compatibility (EMC)
AS/NZS 61009		Residual current operated circuit-breakers with integral overcurrent protection for household and similar uses (RCBOs)
AS/NZS 61009.1	2015	General rules (IEC 61009-1, Ed. 3.2 (2013) MOD)
BCA Spec 12	2022	Fire resistance - Fire doors, smoke doors, fire windows and shutters
NCC A5G1	2022	Governing requirements - Documentation of design and construction - Suitability

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