

**SPECIFICATION OF WORKS AND
MATERIALS FOR:**

Proposed Single Storey Dwelling

**Lot 2300 Elimatta Avenue,
Jordan Springs. NSW**

PRELIMINARIES

Site

The site is situated at Lot 2300 Elimatta Avenue, Jordan Springs NSW

Tenderers shall visit the site and make themselves familiar with the site conditions. No variations or additional time will be granted for situation arising from the Tenderer's failure to examine the site conditions.

The Builder will be responsible for verifying all site dimensions and levels, and the existence of all services, prior to the commencement of the building works.

Generally

All work , materials, etc. are to be in accordance with the requirements of the Building Code of Australia, all relevant Australian Standards and the requirements of all Authorities.

General Definitions

The following definitions will apply in regards to the drawings and specification:

Supply	:	Supply only, do not install
Install	:	Install only, do not supply
Provide	:	Supply and Install
Required	:	Required by the contract documents, or by the local council or any other statutory authority
Selected	:	Selected by the Proprietor
Approved	:	Approved by the Proprietor
Sub-contractor	:	Any contractor for a particular trade or his subordinate contractor employed on the work.
Provisional Sum	:	A sum specified to be included in the Tender Price in respect of nominated sub-contract works.
Sub-contract	:	A contract between the Builder and an approved firm to perform a section of the works.
a.b.s.	:	As before specified elsewhere in the specification.
a.h.s.	:	As hereafter specified elsewhere in the specification.

Standards.

Current editions of the S.A.A. Specifications and Codes shall apply to materials and workmanship.

Insurance.

The Builder is to insure all the works against fire & storm, adequately insure against Public Risk and to insure as required by the Workers Compensation Act and the Department of Fair Trading. Evidence of all insurances is to be provided to the Proprietor prior to the commencement of work.

Quality of Work and Materials.

The whole of the work shall be faithfully executed in the most tradesman like and substantial manner and all materials shall be new and of the best quality of their respective kind.

Manufacturers' or Suppliers' Recommendations

Select, store, handle and use proprietary products or systems in accordance with the current written recommendations of the manufacturer or supplier.

Barriers

The Builder shall provide and maintain all necessary temporary screens, fencing, footways, cartways, lighting, etc., for the protection of the Public, the land and the property, and at the completion of the works, the builder shall remove all traces of same.

Temporary Roads, Crossings

Provide all necessary temporary roads, and pavement crossings, maintain and protect from damage existing crossing. Make good any damage to footpaths, roads, kerbs, and gutters, street crossings, caused during the Construction period.

Adjoining Properties

The Builder shall not commit any act of trespass and shall effectively protect all adjoining properties and owners against loss, damage or injury that may occur through the carrying out of the work.

The Builder shall make good any such loss, damage or injury and shall indemnify the Proprietor against any proceedings in respect of the above.

Removal of Rubbish

It is required that the site be maintained in a clean and tidy condition particularly during the later stages of construction. To this end the Builder shall institute and maintain an efficient system for collection and removal of rubbish as it accumulates.

Gales and Storms

Proper and adequate shoring and protection shall be used throughout to ensure that there will be no damage by gales, storms and rain, of the works. Damage shall be made good by the Builder, should it occur, at no cost to the Proprietor.

Plans & Specifications

Any work indicated on the plan but not in the specifications or visa versa and any item not showing on either the plans or specifications, but which is obviously required as part of proper construction or finishing, is to be included and carried out as part of the contract.

The architectural plans are to be read in conjunction with the Structural Engineer's plans.

No variations to the plans and specifications are to be made without the

written consent of the Proprietor.

Completion

On or by the Date of Practical Completion of the Works, the whole of the works and the site shall be cleaned of all surplus materials and rubbish removed, all doors and windows eased, glass cleaned, keys tabulated and handed over, floors swept, stains and blemishes removed, tools temporary buildings, etc., removed and premises left fit for occupation.

Practical Completion

Practical Completion of the Works shall mean “reasonably fit for use or completion” and in addition shall mean that the following operations have been satisfactorily completed:

- The building made watertight and weatherproof and the external walls are complete,
- All internal walls & flooring complete,
- All doors & windows, including door & window furniture have been installed and are operating correctly,
- All fixtures, fittings, etc., have been installed, tested and are operational,
- All external paving is complete,
- All services to the building have been installed, connected and tested and are operational,
- All guarantees and warranties have been provided to the Proprietor,
- Final inspections and certification has been obtained from all relevant authorities,
- Certificate of Compliance is issued by Council

SITE WORKS

General

Protect property which is to remain on or adjacent to the site, from interference or damage. Use appropriate means including shoring, protective screens, sheeting and the like. Make good any such damage to match existing.

Existing services shall be maintained in a safe manner and protected during construction.

Excavation

Excavate as required to carry out the works shown on the drawings.

Do not use explosives in groundworks. Do not excavate by machine within 1.0 metre of existing underground services. Underpin any exposed Public Utility service as instructed by the relevant Authorities.

Suspend any groundworks during the inclement weather which would result in unsatisfactory work. Provide all barriers, trenches, etc., necessary to keep the work free of water.

Excavations shall be accurate to shape and profile and free from loose earth and stones.

All sediment control devices required by Council are to be provided prior to the commencement of work.

Existing Trees

Existing trees shall be protected from damage during the currency of the Contract.

CONCRETING - BCA Parts 3.2.3

General

All concrete work and materials to be in accordance with the Structural Engineer's specifications and details.

Also to be in accordance with BCA parts 3.2.5

BRICKWORK AS3700 - BCA Part 3.3

Extent of work

Provide the brick elements as shown on the drawings.

Bricks

Clay bricks shall be as selected, sound, well burnt, standard of even size and shape with true arises.

Bricks below damp course level : Use Exposure class to AS 1225.

Pack bricks to prevent damage in transit. Unload bricks by hand. No tipping is allowed. Face bricks shall have sharp, straight arises on visible faces.

Mix bricks from different pallets (where used as face) to ensure an even mix or uniform appearance over the whole of the Works.

Sand

Sand to be clean, sharp, fine aggregate sand with low clay content, free of efflorescing salts and impurities.

Mortar - BCA Parts 3.3.1.6

Use mortar mixes to comply with the requirements of AS 3700. Machine mix mortar in small batches and use immediately. Retempered mortar will not be permitted.

Mortar admixtures approved by the Proprietor may be used in strict accordance with printed recommendations of the manufacturer.

Brickwork - AS3700 - BCA Part 3.3

No part of brickwork to be carried up more than scaffold height. Carry no part of work up more than one metre above adjoining work and then only if raked back at ends. All brickwork stretcher Bond, except where the drawings indicate otherwise.

Setout brickwork with even joints of uniform width.

Seven courses vertically = 600 mm, 2-1/2 bricks horizontally = 600 mm.

Construct whole of brickwork to the several forms and dimensions shown or specified and keep to true level course lines with plumb corners and reveals. Keep perpend vertical and in line. Where required all bricks shall be sawn with carborundum saw to the required shape and/or slope.

Veneer Walls - BCA parts 3.3

Build in 3mm galvanised wall ties for attachment to the timber wall frame.

Cavity space to be maintained throughout the walls. Cavities and weepholes to be kept clean and clear. All mortar joints on inside face of brickwork to be flush with bricks.

Cavity Flashing

Material: Super "Alcor" aluminium core, bitumen coated both sides, full width of external brickwork at a level not higher than the underside of the floor bearers, carried across the cavity to underside of bottom plate of timber framed internal skin & turned up min 30mm. Lap cavity flashing full width at angles and intersections and 230 mm at joints.

Provide flashings as noted above under all window, fixed to underside of window sill, bent downwards & built into the brick sills.

Weepholes

Omit every third perpend in the brick course of the external brick skin directly above all cavity flashings.

Completion

Wait upon and make good after this and other trades. Replace defective

bricks, point up faulty joints, put log holes and chasings.

Generally face brickwork is to be cleaned to an approved finish.

CARPENTRY - AS 1170.2

Generally

Timbers shall be best quality of their respective selection and grade conforming with relevant AS specification requirements.

Scantlings to be in long lengths, sawn square, sound, free of shakes, and shall be of minimum scheduled sizes unless otherwise noted on the Drawings.

Timbers shall be seasoned to an even moisture content between 10% and 15%. All runs of 4,800 mm and less must be in single lengths. Back plough wide boards subject to warping.

All hardwood stress grade F11 unless noted otherwise and all softwood stress grade F7 unless noted otherwise.

Timbers are not to be weakened by cutting, chipping, etc..

Framing Generally

Cut fix and erect all timber framing in accordance with the "National Timber Framing Code AS 1684".

All fixings, fastenings, anchors, lugs and the like shall be of approved type and shall transmit loads and stresses imposed and ensure rigidity of the assembly.

Fixings, fastenings, anchors, lugs and the like shall be as specified by the manufacturer for the fixing of prefabricated frames, building boards or other manufactured components. Bolts in framing and structural work shall be complete with nuts and washers, all galvanised steel. Masonry anchors shall be of the approved patent expansion type. Perform all operations necessary in first class carpenter's and joiner's work. Aris visible edges in sawn work.

Provide all accessories necessary for the proper completion of the work.

Floor framing to be true & level. Packing is not permitted. Wall frames to be true and plumb.

Trim framing where necessary for all openings, including those required by other trades.

All prefabricated roof trusses are to be installed in accordance with the manufacturer's recommendations.

Sheet Flooring

Sheet flooring to be 22mm thick structural particleboard sheets, as selected, fixed in accordance with the manufacturer's recommendations.

ROOFING - BCA part 3.5.1

Extent

The roofing sub-contract including roof tiles as selected, roof plumbing, over flashings and the like.

General

Building structure must be square and roof area level, straight and true prior to the commencement of tiling work.

Metal sheeting shall not be loaded on the roof structure until all load bearing timber walls are securely fixed and braced. All vent pipes, gutters, valley flashings and bargeboards are to be completed before tiling work commences.

Roofing

Roofing shall be selected roof tiles, installed in accordance with the manufacturer's details. All accessories such as hip and ridge tiles are to match roof tiles.

Set out roofing to give an even tile gauge each course and full tiles at verges.

Sarking

Provide sarking to all roof areas. Cover rafters with sarking, lapped and taped at all joints in accordance with the manufacturer's recommendations. Finish sarking 50mm clear of ridges. Provide 4.5mm fibre cement anti-ponding boards at perimeter of roof.

Sarking material

Standard: To AS/NZS 4200.2.

Proprietary Item: Bradford Thermofoil 753 (heavy weight)

Roof Plumbing

Eaves gutters are colorbond metal as selected.

Lap 30 mm at joints and rivet set in sealant. Support every 900 mm with gutter brackets, Colorbond finished, to match gutter. Reinforce all angles with gussets and provide return ends where required. Set gutters with minimum 1:200 fall to outlets. Seal all fasteners and joints with an appropriate silicon. Downpipes are to be 100x75mm Zincolume Steel, Colorbond finish to match existing downpipes. Secure downpipes to wall with colorbond astragals, spaced at 1800 mm maximum intervals.

PLUMBING & DRAINAGE - BCA part 3.5.2 AS 2179

Scope

Provide all necessary labour and materials to complete the plumbing and drainage system including stormwater drainage. Allow also for all fixtures, fittings and accessories. Make arrangements for inspections required by the relevant Statutory Authorities and pay all fees required, with regards to the plumbing, drainage & stormwater services.

General

Service trenches are not to be located closer than 600mm to the building's footings where the trenches run parallel to the footings.

Install piping in straight lines, to uniform grades. The number of joints are to

be kept to a minimum. Prevent direct contact between incompatible metals. Pipelines in sub-floor areas are to be a minimum of 150mm above ground level.

All pipes are to be pressure tested to ensure no leaks prior to concealment

Stormwater

Extend stormwater drainage system to service all downpipes, surface drainage, etc.. Provide all accessories and fittings necessary for the proper functioning of the stormwater system.

During construction, provide temporary covers and keep the system free of debris. On completion flush the system with water and leave the system clean.

ELECTRICAL AS/NZ 1680

Scope

Provide all necessary labour and materials to complete the electrical works in accordance with the S.A.A. rules and the requirements of the local supply authority.

General

Make arrangements for inspections by required by the relevant Statutory Authorities and pay all fees required, with regards to the electrical services. Conceal cables and conduits in a manner that will allow wiring replacement without structural work or the removal of cladding or lining.

Allow for the supply and installation of all fixtures, fittings and accessories as selected by the Proprietor.

WALL, CEILING & SOFFIT LININGS AS2589

Scope

Provide all materials & labour to complete all wall, ceiling and soffit linings.

Wall Lining

All wall linings to be 10mm thick plasterboard, installed in accordance with the manufacturer's recommendations.

Use recessed edge sheets and finish flush using perforated reinforcing tape.

Provide zinc coated metal corner reinforcement at all external corners and zinc coated metal control joints where control joints occur in the structure.

Plasterboard Ceiling Lining

Ceiling lining to be 13mm thick plasterboard, installed in accordance with the manufacturer's recommendations. Use recessed edge sheets and finish flush using perforated reinforcing tape.

Cornice

Provide 90mm plasterboard cornice to all ceiling/wall junctions, installed in full

wall lengths where possible and neatly mitered at all angles.

Fibre Cement Eaves Lining

Provide 4.5mm thick fibre cement eaves lining, installed in accordance with the manufacturer's details.

WINDOWS AS 2047-48

Windows

Where shown on the drawings, provide Aluminium framed windows as selected.

Use only windows manufactured to comply with the wind classification for the site.

Install windows in accordance with the manufacturer's recommendations.

Install flashings, weather bars, drips, storm moulds caulking, etc., as required to provide a watertight installation.

Windows are not to take building loads including loads caused by deflection or shortening.

JOINERY AS3700 - BCA Part 3.3

Doors

Provide timber doors where shown on the drawings to as selected. Internal door sars to be hung on two 88mm steel butt hinges.

Supply & install door furniture as selected by the Proprietor.

Skirtings and Architraves

Provide skirtings and architraves as selected by the Proprietor.

FLOOR TILING - AS3958 parts 1 & 2

Generally

Setout tiles to give uniform joint widths, accurately aligned in both directions. Cut tiles to fit neatly around fixtures and fittings. Fall tiles to floor waste. Finish floor tiles at junction of different floor material with clear anodised aluminium angle. Finish floor tiles flush with finished level of adjacent flooring.

Waterproofing

The Ensuite area is to be waterproofed using a proprietary liquid applied or sheet membrane system which has current Australian Building Codes National Accreditation Certificate and which meets the requirements of the Local Council.

The membrane is to be applied strictly in accordance with the manufacturer's recommendations. Obtain certification as required by Council.

PAINTING

Generally

The general contractor or painter shall examine all surfaces, and if not in proper condition for painting he shall notify the Proprietor before proceeding with the work, failing which he will be held responsible for poor work resulting from imperfect surfaces.

No variation to the quality of paint finish specified will be accepted and the painter shall confer with the firm who supplied the paint materials and comply strictly with their recommendations. All materials are to be delivered to the job in unbroken containers bearing the brand name of the manufacturers.

Workmanship

All work to be executed in accordance with approved trade practice. Materials shall be applied evenly and primers well brushed into the pores of the wood and into crevices and quirks. Finished surfaces shall be uniform in degree of gloss and colour and free from brush marks, runs and any other form of discontinuities. Surface cracks, flaws, nail holes, etc. in woodwork shall be leveled up to the surface of the work with linseed oil type putty after priming coat has been applied.

All external dressed timbers are to be primed before fixing, including the top and bottom edges of doors. Remove door furniture, switch plates, light fittings and other fixtures before painting and refix at completion of painting.

All finishing colours to be chosen by the Proprietor.

Paint Finishes

Unless otherwise specified for a particular item of work, materials to be used in this section or equivalent and are to be applied in accordance with the directions on the container and the technical data sheet.

Stairs, Handrails and Balustrades:

AS1657 & AS 1170

STAIRS, HANDRAILS AND BALUSTRADES: BCA 3.9.1 and 3.9.2

Stairways shall be constructed to the layout as shown on plans with treads of equal dimensions except where shown or where winders are required. All risers in any flight shall be of equal height. All flights shall have a minimum of 2 and not more than 18 risers. Vertical clearances above stairs shall be 2000mm min. to soffit of floor or structure above when measured vertically above nose of tread. Relationship of riser to going shall be between 1:2 and 1:1.35 unless otherwise directed or as permitted in AS1657. Balustrades shall be provided to all landings, decks roofs other elevated platforms where the vertical distance from that level is more than 1 metre above the adjoining floor or finished ground level. Height of the balustrade must be a minimum of 1 metre above landings etc. and not less than 865mm above the nosings of any stair treads or floor of a ramp. Openings in balustrades (decorative or otherwise) and space between treads, eg. riser opening must not allow a 125 mm dia sphere to pass through. Resistance to loading forces of a balustrade must be in accordance with A.S. 1170. Materials and finish of handrails, newel posts and balustrading shall be as directed or agreed by owner. Where balustrades are constructed of tensioned wires provision shall be made to maintain tension applied.