

1 General

All references to "Owner(s)" in this specification are also taken to be references to proprietor(s). All references to Wisdom in this specification are also taken to be references to Contractor. Wisdom is WISDOM PROPERTIES GROUP PTY LTD T/A WISDOM HOMES

1.1 FEES

Wisdom will obtain permits, pay all standard lodgment fees and notify Local Authorities to enable the works to be carried out within the limits of the working drawings and this specification. Additional fees for non-standard approvals will be provided by the Owner(s).

1.2 SITE & BOUNDARIES

The house Site must be ready for Wisdom in time for the works to commence in accordance with the Contract, cleared by the Owner of long grass, shrubs and trees.

Should the condition of the Site or the existing weather conditions necessitate the provision of a concrete pump due to the Site not being cleared and or accessible as described above then any expense incurred is payable by the Owner to Wisdom as a Variation to the Contract Price in accordance with Clause 22 of the Contract.

Any time lost as a result of having to clear the Site, provide access or inclement weather will be added to the Contract time by way of an extension of the Building Period (extension of time) (as defined in the Contract) and the Contract time (Building Period) will be extended until Wisdom is able to recommence the works.

The Owner must indicate to Wisdom the boundaries of the Site and accept responsibility for the correctness of the position indicated to Wisdom. If there are any doubts as to the accuracy of the boundary positions for the setting out of the works or fencing the Owner agrees to have the land resurveyed and pegged at the Owner's expense.

1.3 SANITARY

Prior to the commencement of any works, unless toilet facilities exist on Site, Wisdom will provide sanitary accommodation to comply with Local Government Authority regulations and will remove the sanitary accommodation on completion of the works.

1.4 PLANT & LABOUR

Wisdom must supply all materials, scaffolding, tools and plant and do all works in all trades as described in the tender, working drawings and schedule of fittings necessary to carry out the true intent of this specification to a reasonable and satisfactory completion of the Contract in all respects.

1.5 MATERIALS

All materials used throughout the works must be new (unless otherwise specified) and of good quality of their several respective kinds as specified. Any defective materials must be removed from the Site.

1.6 DIMENSIONS

Figures dimensioned on the working drawings are given preference to scaled dimensions. Internal dimensions must be taken between timber plates. External dimensions are given preference to the brickwork. Ceiling heights are measured between the top of the concrete floor level to the underside of the ceiling timbers.

1.7 COLOURS

The Owner must provide to Wisdom upon request selected colours for all items and materials specified on the colour selection schedule.

1.8 SUBSTITUTION

Should any items or materials to be used in the construction of the works and are not available or are deemed to be unsuitable for use in construction of the works, until after a period in which the opinion of Wisdom will cause unwarranted delay, then the Owner(s) must within fourteen (14) days from receipt from a written request from Wisdom select other readily available items or materials which must take the place of those originally chosen. Should the Owner(s) fail to comply with the written request within the stipulated period, Wisdom reserves the right to select an alternative item or material equal in quality to the original choice and use in substitution. If there is a difference in

price of the alternative items or materials, this will be dealt with as a Variation under Clause 22 of the Contract.

1.9 VARIATION OF COLOUR & TEXTURE

Manufacturing processes may vary colour and texture of samples from which selections are made. Variations in clay base material deposits and climatic conditions may from time to time vary colour and texture of bricks supplied. Wisdom does not accept any responsibility for any such Variation in colour or texture provided that the supplied items or materials are of the same brand name, colour type or description as selected by the Owner.

2.0 APPLIANCES & TAPWARE

In the event that a specific appliance or tapware item becomes obsolete or there is a shortage of supply, Wisdom Homes reserves the right to replace the item with an equivalent or better quality product. If there is a difference in price with the equivalent or better product, this will be dealt with as a Variation under Clause 22 of the Contract.

2 Services

2.1 WATER

The Contract Price allows for the house water supply to be available from an existing main of the local authority located directly in front of the Site. When no reticulated water supply exists the Owner must arrange a temporary fresh water supply for tradesman and building purposes with tanks or other means satisfactory to Wisdom and must be available prior to the commencement of construction. The difference in price will be dealt with as a Variation under Clause 22 of the Contract.

2.2 GAS SERVICE

The Owner must make application to the Gas Authority for connection to the main and pay the necessary fees when requested by Wisdom. Where Liquid Petroleum gas type equipment is specified Wisdom will provide the supply lines from the appliances to a wall connection point for the gas cylinders on the external brickwork. The gas cylinders must be provided at the expense of the Owner. The Owner is responsible for the arrangement of the supply of the gas

cylinders and connection of the cylinders to the supply line along with all other associated equipment and fittings.

2.3 AERIAL/UNDERGROUND POWER SUPPLY

The Contract allows for the power supply to be connected to the dwelling directly from the relevant authority's 240 volt power supply terminal not more than 18 meters away from the works. Should the power supply be further away any extension costs or heavier cable requirements needed due to low voltage or underground cable must be carried out at the responsibility and expense of the Owner. Underground power, when available, must have an electrical pillar located at the property boundary and not further than 7m from the house position.

2.4 SEWER CONNECTION

Sewer connection must be carried out by a Wisdom licensed drainer to boards or council junction point as per sewer diagram in accordance with Australian Standards.

2.5 SEPTIC CONNECTION

Septic connection must be carried out by the nominated licensed sub-Contractor in accordance with Council approval plans.

3 Site Preparation

Explanatory information:

These provisions relate to general *Site* preparation for footings, services, drainage and installation of termite barriers to assist in termite management.

3.1 EARTH WORKS

Construction earth works will be carried out in accordance with section 3.1.1.1 of the Building Code of Australia (BCA).

3.2 DRAINAGE

The BCA does not require the installation of drainage systems. Accordingly, these requirements need only be applied when these systems are used. Information on the need for drainage systems may be obtained from the *appropriate authority*. The legal discharge point from a building *Site* is generally

determined by local government authorities. Drainage will be designed and constructed in accordance with AS/NZS 3500.3 and section 3.1.2 of the BCA.

3.3 SERVICE TRENCHES

Wisdom must excavate service trenches to a minimum cover of 150mm where Site conditions allow.

3.4 DEMOLITION

Demolition by the Owner must occur before works are carried out by Wisdom. All demolition works need to comply with AS 2601. No used or excess material is permitted to be buried on the Site.

3.5 TREE TO BE RETAINED

Trees nominated by Council that must be retained must be marked by Wisdom using suitable, easily visible and removable means of identification.

3.6 TERMITE TREATMENT

Provide a termite barrier treatment in accordance with part 3.1.3 BCA of the housing provisions or AS 3660.1.

NOTE: Many of the materials used in the construction of your home may be subject to termite attack. You should ensure that your home is checked at least annually by an appropriate expert in termite control whose advice should be sought and followed.

4 Footings, Slabs, External Steps and Paths

Explanatory information:

This Part specifies the requirements for the excavation and filling for the footing or slab together with the construction of various alternative concrete slab and footing configurations.

4.1 PREPARATION OF FOOTINGS AND SLABS

The preparation of footings and slabs will be in accordance with section 3.2.2 of the BCA.

4.2 CONCRETE

Concrete will comply with section 3.2.3 of the BCA and as follows unless otherwise stated in the engineering drawings/specifications:

- (a) Concrete must be manufactured to comply with AS 3600.

4.3 STEEL REINFORCMENT

Materials used for reinforcing steel must comply with AS 2870 and be—

- (i) welded wire reinforcing fabric; or
- (ii) trench mesh; or
- (iii) steel reinforcing bars.

4.4 SITE CLASSIFICATION

The *foundation* where the footing must be located must be classified in accordance with AS 2870. Also Table 3.2.4.1 of the BCA provides the general definition of Site classes.

4.5 FOOTING AND SLAB CONSTRUCTION

Footing and slab construction will be in accordance with sections 3.2.4 and 3.2.5 of the BCA and AS 2870.

4.6 INSPECTIONS

All footing trenches must be inspected by the Local authority or principal certifier and approved by either the Local authority and / or a qualified engineer prior to concrete placement.

4.7 CONCRETE SLAB ON GROUND (WAFFLE POD)

- (a) Concrete slab to be 85mm reinforced concrete with rebated edge and integral beams in accordance with engineer requirements ref AS1379.
- (b) Finished Floor Levels (FFL) noted on all plans will be installed with a tolerance of + or – 100mm (10cm).

4.8 CONCRETE PORCHES (IF BY WISDOM AND VARIATION)

Concrete porches and porch slabs must be constructed as described in the tender and shown on working drawings and to engineering details.

4.9 PRECAST CONCRETE STEP TREADS (TIMBER FLOOR CONSTRUCTION ONLY)

Provide concrete treads and risers to ground level as shown on working drawings and noted as included in the Tender Document.

4.10 CONCRETE PATHS

External concrete paths must be generally as described in the tender and shown on plans and finished with a wooden float in accordance with AS3727.

4.11 CONCRETE DRIVEWAYS

Concrete driveways must be generally as described in the tender and shown on plans and constructed in accordance AS3727.

4.12 CONCRETE FLOORING

Wisdom Homes does not provide any type of polished concrete floor finishing.

4.13 OUTDOOR LEISURE/PORCH CONCRETE FINISHES

All concrete finishes to these areas are intended for alternate finishes to be applied either during construction or by the Owner post Settlement. Providing there are no structural issues, Wisdom will not be responsible for any omissions/scratches to these areas.

4.14 DROPPED EDGE BEAM FINISH

In garages when a dropped edge beam is required, it will be a simple but concrete finish, painted to match the garage wall colour only.

5 Masonry

5.1 MASONRY WALLS

Masonry walls must be constructed in accordance to section 3.3.1 of the BCA and AS 3700.

5.2 EXTERNAL WALLS

(a) Masonry veneer must comply with the relevant provisions of this Part and be constructed as follows:

- (i) Bracing requirements — masonry veneer *external walls* must be tied to a *loadbearing* frame constructed in accordance with Part 3.4 of the BCA;
- (ii) Masonry veneer walls, non-*loadbearing*, must be constructed with a leaf of masonry not less than 90 mm wide.

5.3 INTERNAL WALLS

Internal masonry walls will be constructed in accordance with section 3.3.1.3 of the BCA.

5.4 ISOLATED MASONRY PIERS

Isolated masonry piers supporting carports, veranda's, porches and similar roof structures, which form part of the main roof, or are attached to a wall of a Class 1 building must be not less than 290x290 mm and comply with section 3.3.1.4 of the BCA.

5.5 MORTAR MIXES

Mortar mixes are in accordance to section 3.3.1.6 of the BCA and also comply with AS 3700.

5.6 MORTAR JOINTS

Unless otherwise specified masonry bed joints must be in accordance with section 3.3.1.7 of the BCA.

5.7 VERTICAL ARTICULATION JOINTS

Vertical articulation joints used in the masonry construction will be in accordance with section 3.3.1.8 of the BCA.

5.8 SUB-FLOOR VENTILATION

Sub-floor ventilation under suspended floors must be in accordance with Section 3.4.1 of the BCA.

5.9 WALL TIES

Wall ties will be installed in accordance with section 3.3.3.2, Figure 3.3.3.1, Table 3.3.3.1 of the BCA and to AS/NZS 2699.1.

5.10 FIXING STRAPS AND TIE-DOWN SYSTEMS

Fixing straps and tie-down systems will be installed in accordance to section 3.3.3.3 and Figures 3.3.3.3 (a) and (b) of the BCA.

5.11 LINTELS

Lintels in masonry may be according to section 3.3.3.4, Figures 3.3.3.4 and 3.3.3.5 of the BCA.

5.12 CORROSION PROTECTION

Corrosion protection of built-in structural steel members such as lintels, shelf angles, connectors, accessories (other than wall ties) and the like must be in accordance with section 3.3.3.5 and table 3.3.3.2.

5.13 WINDOW SILLS

Window sills must be face brickwork on edge unless otherwise specified.

5.14 BRICK CLEANER

All face brickwork must be cleaned with diluted hydrochloric acid and washed with clean water.

6 Waterproofing of Masonry

Explanatory information:

Weatherproofing of masonry will be carried out in accordance with the appropriate provisions of AS 3700.

6.1 WIDTH OF CAVITY

In brick veneer and cavity masonry construction, a cavity must be provided between the inner and outer masonry leaves or the masonry leaf and the supporting frame in accordance with section 3.3.4.2 of the BCA.

6.2 CAVITY VENTILATION AND DRAINAGE

Open perpendicular joints (weepholes) must be created in the course immediately above any *DPC* or *flashing* in accordance with section 3.3.4.3 of the BCA.

6.3 DAMP-PROOF COURSES - MATERIALS

Damp-proof courses will be installed in accordance with section 3.3.4.4 of the BCA and must consist of—

- (a) a material that complies with AS/NZS 2904; or
- (b) embossed black polyethylene film of high impact resistance and low slip, with a nominal thickness of 0.5 mm prior to embossing, and meeting the requirements of clause 7.6 of AS/NZS 2904; or
- (c) polyethylene coated metal, that has an aluminium core of not less than 0.1 mm thick, is coated both sides with bitumen adhesive enclosed in polyethylene film of not less than 0.1 mm thick on each face, and has a nominal total thickness of not less than 0.5 mm prior to embossing; or
- (d) bitumen impregnated materials of not less than 2.5 mm thickness, that meet the requirements of clause 7.5 of AS/NZS 2904, when used in walls which are not higher than 7.8 m above the level of the *DPC*; or

- (e) termite shields (with no penetrations) continuous through the wall or pier.

The installation of the damp-proof courses material will be done in accordance with section 3.3.4.5 of the BCA.

6.4 FLASHINGS

Flashings materials will comply with AS/NZS 2904 or Table 3.3.4.1 of the BCA and —

- (a) be built-in as the work proceeds; and
- (b) where electrolytic action could otherwise occur, different materials must be isolated in accordance with Table 3.5.1.2 of the BCA.
- (c) lead flashings must not be used on any roof that is part of a potable water catchment area.

Note, other related flashing, waterproofing standards and BCA items:

- The location of the flashing will be in accordance with section 3.3.4.7 of the BCA.
- Flashings at the base of cavity walls are in accordance with section 3.3.4.8 of the BCA.
- Sill and Head Flashing will be in accordance with section 3.3.4.9 of the BCA.
- Flashing at a roof abutting a wall will be in accordance with section 3.3.4.10 of the BCA.
- Chimney flashing will be in accordance with section 3.3.4.11 of the BCA.
- Weatherproofing for single skin masonry walls will be in accordance with section 3.3.4.12 of the BCA.

6.5 STEEL BEAMS – COLUMNS

Structural steel work where required in works must be supplied to comply with engineer's computations and details as to comply with Australian Standards.

6.6 SLEEPER PIERS

Sleeper piers up to a height of 1800mm must be 230mm x 230mm brick. Over 1800mm high to a maximum of 2700mm the lower portion pier must be 350mm x 350mm.

7.1 GENERAL

Pre-Fabricated walls and trusses used in the works must be certified by the manufacturer.

Steel Framing – Pre- fabricated wall frames and trusses must be manufacturer AS3623 and certified by the manufacturer.

Timber Framing – All wall and roof frames must be constructed in accordance with AS1684.2 or part 3.4.3 BCA.

7.2 SUB-FLOOR VENTILATION

The sub-floor space between a suspended floor of a building and the ground must be in accordance with the following section 3.4.1 of the BCA and where applicable (excessively damp areas or subject to frequent flooding) AS 1684 Parts 2, 3 or 4.

7.3 BEARERS

Bearers must be 100mm x 75mm placed on top of piers at spacing's as shown on working drawings or otherwise in accordance with AS 1684.2.

7.4 FLOOR JOISTS

Floor joists must be either 100mm x 50mm at 600mm centers secured to bearers.

Floor joists to 1st and 2nd storey work must be in accordance with Building Code of Australia at maximum centers as noted on the working drawings.

Where joists run parallel within internal walls provide and fix double joists under bottom plate. Otherwise they must be in accordance with AS 1684.2.

7.5 TOP & BOTTOM PLATES

Plates must be in long lengths butted at joints and intersections. Provide gang nail plates where top plates are butted.

7.6 STUDS

Wall studs must be at a maximum 600mm centers unless engineered otherwise.

7.7 HEADS OVER OPENINGS

All heads over openings must comply with AS 1684.2.

7.8 BRACING

Bracing must be in accordance with AS 1684.2 and designed in accordance with AS 4055-1992 wind loads for housing.

7.9 ROOF MEMBERS

Roofs must be pitched to the slope as shown on the plans. All rafters, hips, ridges, valleys, purlins, struts, collar ties and wind bracing as well as stress grades must comply with AS 1684-1992.

7.10 CEILING JOISTS

Ceiling joists to be maximum 600mm centers unless engineered otherwise and where possible be laid in the same direction as the roof rafters. Fix ceiling joists to rafters and where lapped over partition walls spike together.

7.11 VALLEY BOARDS

Valley Boards must be 19mm thick and sufficiently wide enough to support valley gutters.

7.12 ROOF TRUSSES

Roof trusses where used must be fabricated in a proper factory and each truss must be suitably marked to identify the manufacturer. Roof trusses must be erected fixed and braced in accordance with the fabricators written instructions.

7.13 MAN HOLE

Provide a manhole in ceiling trimmed between ceiling joist to a minimum size of 560mm x 560mm. Provide a suitable cover. Man hole to be positioned between bottom chords of roof trusses near nominated position as indicated on working drawings, or where roof truss location permits a viable entry point.

7.14 EAVES

Top Chords must overhang the external walls as per the measurement shown on the drawings. Top Chords to be plumb cut and fitted with the fascia as specified. Where a pre-formed metal fascia system is used it must be fixed in accordance with the manufacturer's specification.

Line eaves soffits have 4.5mm thick fibre cement sheets and plastic moulds at joints.

7.15 FLOORING

Floor joists must be covered with either strip or sheet flooring as specified. Sheet flooring must be installed in accordance with manufacturer's instructions and to comply with AS 1684.2 or part 3.4.3. BCA 04.

7.16 STRUCTURAL STEEL MEMBERS

Structural steel member need to comply with section 3.4.4 of the BCA and:

- (a) AS 4100 — Steel structures.
- (b) AS/NZS 4600 — Cold-formed steel structures.

8 Roof and Wall Cladding

8.0 ROOF CLADDING

Roof cladding will be installed in accordance with section 3.5.1 of the BCA and:

- (a) AS 2049 — Roof tiles, and AS 2050 — Installation of roof tiles;
- (b) AS 1562.1 — Design and installation of sheet roof and wall cladding — Metal;
- (c) AS/NZS 4256 Pts 1, 2, 3 and 5; and AS/NZS 1562.3 — Plastic sheet roofing;
- (d) AS/NZS 1562.2 — Design and installation of sheet roof and wall cladding — Corrugated fibre-reinforced cement;
- (e) ASTM D3018-90 — Asphalt shingles;
- (f) AS/NZS 4200 — Installation of pliable membrane and underlay.

8.1 WALL CLADDING

Wall cladding will be installed in accordance with section 3.5.3 of the BCA and in the event that external fibre-cement sheets and claddings must comply with AS/NZS 2908.2 or ISO 8336.

9 Fascia & Gutter

9.1 GENERAL

All work must comply with the requirements of the relevant authority and all work must be carried out by a licensed tradesperson in accordance with AS2179.1-1994, AS/NZS3500.3.2 and/or AS/NZS3500.5.

9.2 GUTTERS

Provide selected guttering to all eaves set in position with fall to downpipes and secured with the appropriate brackets.

9.3 DOWNPIPES

Provide downpipes as required connected to gutter and roof water drains. Downpipes to be secured to external walls and with all approved fixing method.

9.4 VALLEY GUTTERS

Fix valley gutters to valley boards lapped in the direction of water flow.

10 Glazing

10.1 Application

Glazing compliance will be in accordance with section 3.6.1 of the BCA.

11 Fitout

11.1 SKIRTINGS & ARCHITRAVES

Provide and fix architraves and skirting's to all designated areas neatly mitred or scribed at corner. All skirting's to be installed prior to main floor finishes unless alternatively noted.

11.2 DOOR JAMBS & DOORS

Provide and fix rebated door jambs to suit thickness of the finished wall. Hang front and rear doors with three (3) 85mm steel butt hinges. Hang internal doors with two (2) 85mm steel butt hinges.

Doors must be as specified and furnished with selected lock and furniture.

11.4 KITCHEN CUPBOARDS

Provide kitchen cupboards to floor and walls of kitchen as shown on working drawings. Provide doors and bench tops as selected.

11.5 WARDROBES

Provide built-in wardrobes as shown on working drawings and tender finished with one shelf and one hanging rail. Provide door furniture as specified.

11.6 LINEN CUPBOARD

Provide linen cupboard as shown on working drawings.

12 Plumbing

12.1 GENERAL

All work must comply with the requirements of the relevant authority and with AS/NZS3500.

12.2 WATER SUPPLY

Provide and lay water supply line from the meter to the house. Provide extensions (Rehau or copper or other approved material as Wisdom selects) to the hot water service, kitchen sink, bath, basin(s), shower(s), W.C. cistern(s), laundry trough, and washing machine, dishwasher (if applicable) as well as front and rear taps.

12.3 HOT WATER UNIT

Install hot water system in an approximate position as shown on the working drawings. The hot water service must be connected to the kitchen sink, bath, basin(s), shower(s), laundry trough and washing machine point.

12.4 GAS PLUMBER (WHERE APPLICABLE)

Provide gas service from existing main at front of residence to meter position and extend service to nominated gas appliance positions.

12.5 GAS APPLIANCES

If nominated in the tender provide gas service for the connection of hot water unit, hot plate and room heater.

13 Electrician

13.1 GENERAL

Provide all labour and materials suitable for the installation of the electrical service in accordance with AS/NZS3000:2000. All work to be carried out by a licensed electrician and in accordance with the local supply authority.

13.2 CONSUMER MAIN

Provide and install consumer mains from the main supply line located in the front of the block to the meter and switchboard.

13.3 LIGHTING

Connect all light points in positions as shown on the Electrical working drawings.

13.4 POWER

Connect all power points in positions as shown on Electrical working drawings.

13.5 ACCESSORIES

All accessories must be quality plastic fittings.

13.6 APPLICANCES

Provide power to all electrical appliances as shown on the working drawings.

13.7 TELEPHONE

Telephone points as shown on the working drawings. Telephone connection account must be the responsibility of the Owner.

13.8 SMOKE DETECTORS

Smoke detection units must be placed in accordance with section 3.7.2 BCA housing provisions and comply with AS 3786.

14 Internal Linings

14.1 GENERAL

The walls and ceilings are lined with gypsum plasterboard. Wet areas must be lined with approved water-resistant sheets in accordance with the Building Code of Australia.

14.2 WALL LININGS

Wall linings must be 10mm thick plasterboard sheets fixed to studs by adhesive, clouts or screws. Sheets must have recessed edges and be fixed in accordance with the manufacturer's recommendations.

14.3 CEILING LININGS

Ceiling linings must be 10mm thick fixed to ceiling timbers by screws. Sheets must have recessed edges and fixed in accordance with manufacturers recommendations.

14.4 CORNICE

Provide cornice to ceiling as required. Cornices must be installed where possible in full wall lengths properly fixed and set at all angles.

15 Wet Areas

- 15.1** All internal wet areas must be waterproofed and flashed using an approved waterproofing method and comply with AS3740-2004 and section 3.8.1 of the BCA.

16 Ceramic Tiles

16.1 WALLS

Cover specified wall faces with selected tiles. Tiles must be fixed directly to wall sheeting with approved adhesive and neatly grouted on completion.

16.2 FLOORS

Lay specified floor tiles to bathroom, ensuite, laundry and W.C. in sand and cement mortar or approved adhesive where specified. Provide even fall to floor wastes where necessary

17 Painter

- 17.1** External woodwork to be given if not otherwise specified in the End Panel:

- (a) Two (2) coats of acrylic finish; or
- (b) Two (2) coats of stain.

17.2 METALWORK

Service pipes exposed structural steel and lintels etc. must be cleaned primed and painted in accordance with the manufacturers' specification.

17.3 FIBRE-CEMENT

Clean surfaces and finish with two (2) coats of acrylic paint.

17.4 INTERNAL WOODWORK

Internal woodwork must be given one (1) coat of undercoat stopped and sanded and completed with one (1) finish coat. Unless noted otherwise in the tender.

17.5 CEILINGS (INTERNAL)

To be cleaned and finished with two (2) coats of ceiling white.

17.6 WALLS (INTERNAL)

To be cleaned and finished with two (2) coats of washable low sheen or equivalent.

17.7 GENERAL

All paints, stains, sealers etc. must be of approved brands as selected. Paint finish must be free of dust, hair, paint skins, etc.