HIA GENERAL HOUSING SPECIFICATIONS – NSW



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Particulars

This is the Specification referred to: STREET ADDRESS SUBURB STATE POSTCODE

General Conditions.

1.Introduction

General 1.1

This Specification forms part of the **Contract documents** referred to in the building **Contract** and details the works to be executed and the materials to be used in carrying out those works at the site.

This Specification is to be read as a general specification only. The extent of the works shall be governed by the approved plans and other requirements under the **Contract**.

Any works not fully detailed shall, where appropriate, be sufficiently performed if carried out in accordance with the **National Construction Code (NCC) Series**, the relevant manufacturer's instructions or **Engineer's Instructions**.

Preliminary Use 1.2

This Specification forms part of the **Contract** and should be read in conjunction with the other contract documents.

Prevailing Documents 1.3

Where there is a difference between the plans and this Specification, this Specification shall take precedence. The **Builder** must at all times maintain a legible copy of the plans and this Specification bearing the approval of the relevant **Local Authority**.

Otherwise to the extent of any conflict between documents, the order of precedence set out in the building contract shall apply.

Size and Dimensions 1.4

Unless otherwise stated, all dimensions given in this specification are in millimetres and are nominal only.

Prime Cost and Provisional Sum Items 1.5

Prime Cost and Provisional Sums Items are items that the Owner is to select after the contract has been entered into. The prices listed are the Builder's reasonable estimate of the "cost price" of those items including GST. The prices listed do not include unquantifiable components including the "Builder's margin", cost of cartage and freight.

Definitions 1.6

In this Specification the following definitions shall apply:

"NCC" Series includes NCC Series Volume 2, "Building Code of Australia Class 1 and Class 10 Buildings also known as the 'Housing Provisions', NCC Series Volume 3 Plumbing Code of Australia is also included.

"Engineer's Instruction" includes any soil classification report, preliminary footings report, construction footings report and any other report, recommendation, site or other instruction, calculations or plans prepared by an engineer in respect of the works.

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Where the term **"Local Authority"** is mentioned it shall mean the local council, or other governing authority or private certifier with statutory responsibility for the compliance of the work performed.

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Where referred to in this Specification, "Regulations" shall mean the building Regulations and Codes (including the NCC, as amended) statutorily enforceable at the time application is made for a construction certificate or other permits, consents or approvals relating to the Contract.

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The "HIA Guide" means the HIA Guide to Materials & Workmanship for Residential Building Work.

2. Statutory Requirements The Building Works 2.1

The building works outlined in the Schedule of Works, annexed to this Specification, shall be constructed in accordance with: the **Regulations** and in particular the Performance Requirements referred to in the **NCC**, Housing Provisions, Volume 2;

any conditions imposed by the relevant development consent or complying development certificate; and

commitments outlined in the BASIX Certificate

Compliance with Requirements of Authorities 2.2

<u>The</u> **Builder** is to comply with the requirements of all legally constituted authorities having jurisdiction over the building works and the provisions of the Home Building Act.

Electricity 2.3 Where there is no existing building, the **Builder** is to make arrangements for any electrical power to be used in the construction of the building works. The cost of providing and installing any poles, wiring, service risers or underground wiring etc, as may be required by the electricity supply authority, shall be borne by the **Owner**. Sanitary

<u>Accommodation 2.4</u> Prior to the commencement of the building works, unless toilet facilities exist on the site, the <u>Builder</u> shall provide temporary toilet accommodation for the use of site personnel. Where the <u>Local Authority</u> requires the temporary toilet to be connected to sewer mains, the cost of this work shall be borne by the <u>Owner</u>. On completion the <u>Builder</u> shall remove the convenience.

3. Owner's Obligations

Engineer's

Instructions

3.1 If the **Contract** indicates, the **Owner**, at their expense, shall provide the **Builder** with engineer's reports and specifications (including wind and soil classifications) for the foundation or footing requirements. In these circumstances, if the **Builder** instructs any party to provide such reports, the **Builder** does so only as agent for the **Owner**.

Water Supply 3.2 Where there is no existing building on the site, the **Owner**, at their expense, shall supply adequate water to the site for construction purposes. The contract documents must include all details for management of water providing clarity for the **Owner** and **Builder** regarding items such as rainwater tanks, septic systems and the like.

Sanitation 3.3 Unless otherwise specified the **Owner** shall supply sewerage connection and pay the standard sewer connection fee to the sewerage supply

authority.

4. Plans, Permits and Application Fees

Permits and Fees 4.1 Subject to a contrary requirement under the **Contract**, the **Builder** shall lodge all necessary application notices, plans and details with the **Local**

Authority for approval prior to commencement of construction.

Mines Subsidence 4.2 In areas affected by mine subsidence, the appropriate authority is to be consulted and any work carried out in accordance with the authority's requirements

Setting Out 4.3 The **Builder** shall accurately set out the building works in accordance with the site plan and within the boundaries of the site.

5. Excavations

Excavations 5.1 The part of the site to be covered by the proposed building or buildings and an area at least 1000mm wide around that part of the site or to the boundaries of the site, whichever is the lesser, shall be cleared or graded as indicated on the site works plan.

Top soil shall be cut to a depth sufficient to remove all vegetation.

Excavations for all footings shall be in accordance with the Engineer's

Instructions or the **NCC** requirements.

6. Foundations and Footings

Underfloor Fill 6.1 Underfloor fill shall be in accordance with the NCC.

Termite Risk

Management

6.2 Termite treatment shall be carried out in accordance with the NCC.

Vapour Barrier 6.3 The vapour barrier installed under slab-on-ground construction shall be installed in accordance with the **NCC**.

Reinforcement 6.4 Reinforcement shall conform and be placed in accordance with the **Engineer's Instructions** and the **NCC**.

Support to all reinforcement shall be used to correctly position and avoid any undue displacement of reinforcement during the concrete placement.

Concrete 6.5 Except where otherwise approved by an engineer, structural concrete shall

be in accordance with the **NCC**. Pre-mixed concrete shall be manufactured

in accordance with the $\ensuremath{\text{NCC}}$ with delivery dockets kept on site or available

for inspection by the engineer, or the Local Authority.

Concrete shall be placed and compacted in accordance with good building practice and the **NCC**.

Curing 6.6 All concrete slabs shall be cured in accordance with the NCC.

Footings and Slabs

on Ground

6.7 Concrete slabs and footings shall not be placed until approval to do so is given by the engineer or the **Local Authority**.

Unless otherwise specified bench and floor levels indicated on the site plan shall be regarded as nominal.

Suspended Slabs 6.8 All concrete slabs, other than those supported on solid ground or properly compacted fill, shall be constructed as suspended slabs. These slabs shall

be constructed in accordance with the Engineer's Instructions.

Foundation Walls 6.9 Where specified, masonry foundation walls are to be built on specified footings to the thickness indicated on the plans and to the height of the underside of the floor bearer or bottom wall plate.

Sub-Floor Ventilation 6.10 All sub floor spaces to suspended ground floors shall be provided with adequate ventilation in accordance with the **NCC**.

Sub-Floor Access 6.11 Where required, access to suspended sub floor areas shall be located as indicated on the plan.

7. Retaining Walls

Retaining Walls 7.1 Where the **Builder** is required by the Schedule of Works annexed to this Specification, the **Builder** shall construct retaining walls as shown on the approved plans. Where a retaining wall is not included in the Schedule of Works, the construction of any retaining wall shall be the responsibility of the **Owner**.

8. Effluent Disposa/Drainage

Effluent

Disposal/Drainage

8.1 In both sewered and unsewered areas:

(a) any bath, wash basin, kitchen waste, wash tubs, pedestal pan and the floor grate to a shower recess shall be located in the position shown on the plan (refer to Schedule of Works); and

(b) waste pipes with traps shall be provided to the above fittings and connected to the drainage system.

The whole of the work is to be performed in accordance with the **NCC** and requirements of the sewerage authority concerned.

Septic System 8.2 The **Builder** will provide and install a septic system where applicable to the requirements of the **Local Authority** and in accordance with the manufacturer's instructions.

Stormwater Drainage 8.3 Stormwater drainage shall be carried out in accordance with the **NCC**. The **Builder** will allow for the supplying and laying of stormwater drains as shown on the site plan.

9. Timber Framing

Generally 9.1 All timber framing shall comply with the **NCC**, alternative structural framing shall be to structural engineer's details and certification.

Timber Engineered products may be used provided their design comply with the **NCC** and they are installed in accordance with the manufacturer's instructions.

The work shall be carried out in a proper and tradesperson like manner and shall be in accordance with recognised and accepted building practices.

Floor Framing 9.1.1 All floor framing is to be framed at the level shown on the plan.

Wall Framing 9.1.2 Wall framing is to be erected plumb and straight and securely fastened to the floor framing or floor slab.

The interface between masonry and wall framing will conform with the NCC.

Heads Over Opening

(Lintels)

9.1.3 • All solid timber lintels shall conform to the **NCC**.

Glue laminated beams conforming to AS 1328 or laminated veneer lumber beams to manufacturer's specification and data sheets may also be used.

Roof Trusses 9.1.4 Where roof truss construction is used, trusses shall be designed in accordance with AS 1720 and be erected, fixed and braced in accordance with the manufacturer's instructions.

Bracing 9.1.5 Bracing units shall be determined and installed in accordance with the **NCC** as appropriate for the design wind velocity for the site. Bracing shall be evenly distributed throughout the building.

Flooring 9.1.6 Strip and sheet timber floors shall be installed in accordance with the NCC.

The selection, installation and waterproofing of wet area floors shall conform to the **NCC** when listed in Schedule of Works. Where specified in the contract floors shall be sanded to provide an even surface and shall be left clean throughout.

Roof Framing 9.1.7 Roofs shall be pitched to the slope shown on plan. The work shall be carried out in a proper and tradesperson like manner and shall be in accordance with recognised and accepted building practices.

Metal fascias shall be installed in accordance with the manufacturer's instructions and shall meet the requirements of the **NCC**.

Timber Posts 9.1.8 Unless otherwise specified and where required by the **NCC** posts supporting carports, verandas and porches shall be timber suitable for external use.

Corrosion Protection 9.2 All metal brackets, facing plates and other associated fixings used in

structural timber joints and bracing must have corrosion protection appropriate to the site in accordance with the **NCC**.

Hot Water Storage

Units

9.3 Where a hot water storage unit or solar panels are supported by the roof structure the structure shall be specifically designed to support all imposed loads.

10. Steel Framing

Generally 10.1 Steel framing shall be installed in accordance with the manufacturer's recommendations and the **NCC**.

11. Roofing Claddings

in colour is acceptable.

All roof cladding is to comply with the relevant structural performance and weathering requirements of the NCC and be installed as per the manufacturer's specifications.

Tiled Roofing 11.1 The **Builder** shall cover the roof of the dwelling with approved tiles as selected. The roof shall be fixed and waterproofed in accordance with the **NCC**. Roofing adjacent to valleys should be fixed so as to eliminate water penetration. Where roof tiles are made of natural products slight variation

Metal Roofing 11.2 The **Builder** shall provide and install a metal roof together with accessories as determined in the contract documents in accordance with the **NCC** and the manufacturer's recommendations.

Except where design prohibits, sheets shall be in single lengths from fascia to ridge. Fixing of sheets shall be in accordance with the manufacturer's instructions as required for the appropriate design and wind speed. Gutters and

Downpipes

11.3 Gutters and downpipes as determined in the contract documents shall be manufactured and installed in accordance with the **NCC**.

Corrosion be used where necessary and in accordance

with manufacturer's specifications.

Flashing 11.7 Flashings shall comply with, and be installed in accordance with the NCC.

12. Masonry

Bricks 12.1 All masonry construction and units shall comply with the **NCC**. Tolerances shall only be applied to the total measurements over 20 units.

and not to the individual units. As clay masonry units are natural kiln fired products their individual size may vary due to the manufacturing process.

Concrete Blocks 12.2 Concrete blocks are to be machine pressed, of even shape, well cured and shall comply with the **NCC**. Concrete blockwork shall be constructed in accordance with the **NCC**.

Autoclaved aerated concrete blocks shall be in accordance with the manufacturer's product specification at the time the work is being carried out.

Damp Proof Courses 12.3 All damp proof courses shall comply with the NCC.

The damp proof membrane shall be visible in the external face of the masonry in which it is placed and shall not be bridged by any applied coatings, render or the like.

Cavity Ventilation

(Weepholes)

12.4 Where required open vertical joints (weepholes) must be created in the course immediately above any Damp Proof Course or flashing at centres in accordance with the **NCC**.

Mortar and Joining 12.5 Mortar and joint tolerances shall comply with the NCC.

Masonry Accessories 12.6 Masonry accessories shall comply with the **NCC** and accepted building practices. Articulated joints shall be constructed in accordance with the **NCC**.

Lintels 12.7 Lintels used to support masonry above openings in walls must be suitable for the purpose as required by the **NCC**. Lintels are to be provided to each wall leaf and are to be corrosion protected appropriate for the site

environment and location of the lintel within the structure in accordance with the **NCC**.

Cleaning 12.8 All exposed face brickwork shall be cleaned with an approved cleaning system. Care should be taken not to damage brickwork or joints and other fittings.

13. Cladding and Linings

External Claddings 13.1 Sheet materials or other external cladding shall be fixed in accordance with the manufacturer's recommendations and any applicable special details.

Where required, the specified materials shall be used to line soffits at eaves, open verandas and porches.

Internal Wall and

Ceilings Linings

13.2 Unless otherwise specified, internal linings to walls and ceilings in other than wet areas shall be of gypsum plasterboards.

Plasterboard sheets are to be of a minimum 10 mm thick with recessed edges to facilitate a smooth set finish. Internal angles to walls are to be set from floor to ceiling.

Where specified, suitable cornice moulds shall be fixed at the junction of all walls and ceilings. Alternatively the joint may be set as required for vertical internal angles.

Wet area linings are to be fixed in accordance with the manufacturer's recommendations.

The ceiling access hole shall be of similar material to the adjacent ceiling.

Waterproofing 13.3 All internal wet areas are to be waterproofed in accordance with the NCC.

External tiled decks and balconies where required are to be waterproofed in accordance with the **NCC** and relevant manufacturer's specifications.

14. Joinery

General 14.1 All joinery work (metal and timber) shall be manufactured and installed according to accepted building practices.

Door Frames 14.2 External door frames shall be suitable for the exposed conditions and to receive doors. Internal jamb linings shall be suitable to receive doors as specified in the contract documents. Manufactured door frames shall be installed in accordance with the manufacturer's instructions.

Doors and Doorsets 14.3 All internal and external timber door and door sets shall be installed in accordance with accepted building practice and specific manufacturer's instructions.

Windows and Sliding

Doors

14.4 Sliding and other aluminium windows and doors shall be installed in accordance with manufacturer's recommendations and AS 2047.

All glazing shall comply with the **NCC** and any commitments outlined in the relevant BASIX Certificate.

Architraves and

Skirting

14.5 Architraves and skirting as nominated on the plans or listed in the Schedule of Works shall be installed in accordance with accepted building practice.

Cupboards/ Kitchens/

Bathroom

14.6 Units shall be installed to manufacturer's recommendations. Bench tops shall be of a water resistant material.

Stairs. Balustrades

and other Barriers

14.7 Where required stairs or ramps to any change in levels shall be provided and balustrades or barriers fitted in accordance with the **NCC**.

15. Services

Plumbing 15.1 All plumbing shall comply with the requirements of the **NCC** Volume 3 and the relevant supply authority. All work shall be carried out by a licensed plumber.

Fittings, as listed in the Schedule of Works, shall be supplied and installed to manufacturer's specifications.

Fittings, hot water systems and any rainwater harvesting systems shall be appropriate to satisfy any commitment outlined in the relevant BASIX Certificate.

Electrical 15.2 All electrical work is to be carried out by a licensed electrical contractor to AS/NZS 3000 Electrical installations (known as the Australian/New Zealand Wiring Rules) plus any other relevant regulations. The location of lights, switches, power points and the like, is to be nominated in the contract documents.

Unless otherwise specified, the electrical service shall be 240 volt, single phase supply.

Gas 15.3 All installation (including LPG) shall be carried out in accordance with the rules and requirements of the relevant supply authority.

Smoke Detectors 15.4 Smoke alarms shall be installed in accordance with the NCC.

Thermal Insulation 15.5 Where thermal insulation is used in the building fabric or services, such as air conditioning ducting or hot water systems, it shall be installed in accordance with manufacturer's recommendations to achieve the R-Values required by the NCC or as outlined in the relevant BASIX Certificate.

16. Tiling

Materials 16.1 Tiles shall be as listed in the Schedule of Works or as selected by the **Owner**.

Cement mortar and other adhesives shall comply with AS 3958.1 or tile manufacturer's specifications.

Installation 16.2 Installation of tiles shall be in accordance with AS 3958.1 or the manufacturer's recommendations and accepted building practices.

Where practicable, spacing between tiles should be even and regular.

Expansion joints shall be installed in accordance with AS 3958.1 or the tile manufacturer's specifications.

All vertical and horizontal joints between walls and fixtures e.g. bench top, bath, etc. and wall/floor junctions shall be filled with flexible mould resistant sealant

All joints in the body of tiled surfaces shall be neatly filled with appropriate grout material as specified by the tile manufacturer or accepted building practice.

As tiles are made of natural products a slight variation in colour is acceptable.

Tiles are to be fixed to the substrate with adhesives that are compatible with the substrate and any waterproofing material.

Walls 16.3 Wall surfaces shall be tiled with selected tiles and accessories where indicated by the contract documents.

Floors 16.4 Floors shall be tiled to areas where indicated by the contract documents with selected tiles. Tiles shall be laid in a sand and cement mortar or using an adhesive, where required, edge strips or metal angle to exposed edges in doorways or hob-less showers in wet areas shall be provided in accordance with the **NCC**.

Where required, adequate falls shall be provided to wastes in accordance with the **NCC**.

17. Painting

General 17.1 All paint used shall be of a quality suitable for the purpose intended and the application shall be as per the manufacturer's specifications. The colours used shall be as listed in the Schedule of Works or other relevant contract document. All surfaces to be painted shall be properly prepared to manufacturer's instructions.

18. Workmanship Standards and Tolerances

General 18.1 These general specifications incorporate the **HIA Guide to materials and** Page 11 of 12

workmanship for residential building work.

The **HIA Guide** is to be used by the **Builder** and **Owner** as a point of reference for information on workmanship standards and tolerances, and amongst other things, in deciding whether an alleged defect exists and/or whether the materials used and/or workmanship is in accordance with the plans and specifications.

The parties agree to use the **HIA Guide** (available on builder's website - About Us) in precedence over any other non-legislated guide to standards and tolerances.

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