

# **HOUSING**

**CONSTRUCT SPECIFICATION – SUPPLEMENT 2** 

**GROH (Government Regional Officers' Housing)** 

NATSPEC October 2019

This supplement to the reference specification has been developed by NATSPEC in conjunction with the Western Australia Department of Communities, Housing. The requirements in this document are generic and are to be read in conjunction with project specific documents from the Design consultant, including drawings, schedules and appendices. It does not cover the requirements for every project situation.

The Design consultants' documents take precedence. Check the consultants' documents for any variations to the requirements of the specification.

# Copyright

The copyright for this document remains with NATSPEC and the Western Australia Department of Communities, Housing. All specifiers who make use of this document must be current NATSPEC subscribers.

# **PREFACE**

This specification supplement for GROH (Government Regional Officers' Housing) sets out requirements that are in addition to HOUSING PART C: CONSTRUCT SPECIFICATION for the applicable BCA class of building. Read this supplement in conjunction with HOUSING PART C: CONSTRUCT SPECIFICATION and other project specific documents, including drawings, schedules and appendices and conform to the applicable requirements.

Supplement 2: GROH i October 2019

# **TABLE OF CONTENTS**

0184 Termite management	2
0250 Landscape – gardening	
0272 Asphalt	2
0276 Paving – sand bed	
0331 Brick and block construction	
0421 Roofing	3
0451 Windows and glazed doors	
0551 Joinery	
0572 Miscellaneous fixtures and appliances	
0702 Mechanical	4
0802 Hydraulic	4
0902 Electrical	
Referenced documents	е

i

# 0184 TERMITE MANAGEMENT

# 1 EXECUTION

#### 1.1 COMPLETION

Replace subclause as follows.

# Termite management system notice

Requirement: Permanently fix a durable notice in a prominent location to BCA 3.1.4.4 and as follows:

- Single dwellings: One notice in the main electrical switchboard.
- Grouped and multiple dwellings: One notice to each dwelling, in the electrical meter box.

# 0250 LANDSCAPE - GARDENING

# 1 EXECUTION

#### 1.1 PREPARATION

Add subclause as follows.

# After site clearing

Relief gullies: Provide overflow and disconnected gullies, in locations other than paved areas. Install grating at a level which allows for the placing of 100 mm thick garden soil over the existing soil level.

After site cleanup: Remove undulations and fill depressions to form even grades in areas to be covered by garden soil.

# 1.2 IRRIGATION

#### Reticulation

Insert additional text to subclause as follows.

Garden reticulation cabinet:

- Cabinet: Galvanized sheet steel with top hinged door and the Department of Communities, Housing E key lock.
- Size: 450 mm (high) x 450 (width) x 150 mm (clear internal depth).

Services requirements for cabinets: Provide the following:

- A single GPO.
- Conduit with draw wire, extending from the cabinet to the nearest garden bed. If required, run under paths. Terminate to allow connection of landscaping services.
- Isolating valve to the PCA.

# 0272 ASPHALT

Add worksection as follows.

# 1 GENERAL

#### 1.1 STANDARDS

#### General

Residential pavements: To AS 3727.1.

#### 2 EXECUTION

# 2.1 GENERAL

## Grading

Minimum grade (Vertical:Horizontal): 1:100. Maximum grade (Vertical:Horizontal): 1:8.

#### Edge restraint

Concrete kerbing: To all edges.

#### 0276 PAVING - SAND BED

## 1 PRODUCTS

#### 1.1 COMPONENTS

Add subclause as follows.

#### Paving slabs

Requirement: 38 mm thick precast vibrated concrete.

Surface: Natural grey smooth finish with pencil edge curved top arises.

Under LPG bottles: Provide two 600 x 600 mm slabs.

In situ concrete panels: 50 mm thick mass concrete with surface matching slabs and V joints aligning with joints between slabs.

# 0331 BRICK AND BLOCK CONSTRUCTION

# 1 EXECUTION

#### 1.1 BUILT-IN COMPONENTS

Add subclause as follows.

#### Lintels

Installation: To AS 4773.1 Section 12.

Add clause as follows.

# 1.2 STEEL MESH JOINT REINFORCEMENT

# General

Requirement: Provide galvanized steel masonry mesh joint reinforcement to AAC walls at the following horizontal mortar joints:

- Internal leaf of external cavity walls: One course above main floor level.
- Below wall openings: One course below, extending 400 mm beyond opening edges.
- Door head course of all walls.
- Above wall openings: Every course, extending 400 mm beyond opening edges.

Installation: Using 70 mm wide mesh, provide minimum 1.9 mm² cross section area of longitudinal wires

- Lap mesh at corners and 100 mm at joints.

Add clause as follows.

#### 1.3 PARTY WALLS

# Walls separating dwelling units

Hollow bricks: Do not use.

Non-cavity walls: May be used if:

- The dwelling units to be separated have the same floor level.
- The wall does not form face brickwork internally or externally.
- The wall is supported by continuous concrete floor slab.
- The wall does not separate a bathroom, laundry or kitchen from a habitable room.
- The height of wall from floor level to underside of ceiling joist/trimmer is not greater than 3000 mm.

Cavity walls: Construct from 90 mm wide AAC blocks if:

- The masonry is not in contact with soil.
- The wall does not form face brickwork externally.
- The wall does not separate a bathroom, laundry or kitchen from a habitable room.

Other walls separating dwelling units: Cavity walls constructed with minimum 90 mm wide, cored or solid, calcium silicate or clay bricks.

Wall height: Extend wall to maximum 85 mm below the roof covering.

# 0421 ROOFING

# 1 EXECUTION

Add clause as follows.

# 1.1 ROOF LIGHTS

#### General

Type: Translucent acrylic dome supported on prefinished steel frame with ducting to a translucent plastic ceiling panel.

Nominal size:

- Roof dome: 600 x 600 mm.

- Ceiling panel: 550 x 550 mm.

Installation: To the manufacturer's

recommendations.

Ventilating roof light: Where required, provide minimum 18,000 mm<sup>2</sup> effective ventilation to outside air. Vent to be insect screened.

Ducting: Prefinished/coated steel sheeting or hardboard.

- Duct interior surface colour: White.

Ceiling panel: Finish flush with ceiling lining.

# 0451 WINDOWS AND GLAZED DOORS

#### 1 PRODUCTS

# 1.1 COMPONENTS

Add subclause as follows.

#### Window screens

Location: Provide to all openable windows.

Types: Bushfire protection, security, cyclone debris protection.

 Powder coat finished stainless steel screw clamped 0.9 mm strand type 304 stainless steel wire mesh screens.

Insert additional text to subclause as follows.

#### Security screens

Requirement: Provide hinged and sliding security screen doors to the external face of each entry door to dwelling as follows:

- Frame finish: Powder coated to match adjoining frame colour.
- Mesh: Heavy duty insect screen mesh.
- Sliding security screen: To sliding glass doors.

# 2 EXECUTION

#### 2.1 INSTALLATION

Add subclause as follows.

# Sliding windows

Locking: Provide keyed vent lock bolt to each sliding window sash.

Lock installation: Install bolt so that sliding sash may be locked in closed position or with a 100 mm opening. Provide holes as required.

Keying: Provide as follows:

- Lock bolts in each dwelling to be keyed alike.
- Number of keys: Two for each dwelling.
- Key labels: Identify dwelling number, lot number, street number, street name and locality.

Add subclause as follows.

# Window screens

Mounting: Top hung, mounted in a surrounding base frame with 3 mm thick aluminium support legs, mitred and corner staked at intersecting corners.

- Hinge: Minimum three 70 mm fixed pin hinges for each screen.
- Hinge position: 170 to 180 mm from outer edge of screen at 500 mm centres.

- Window perimeter: Provide a flat, stable, sealable surface to mount the base frame of the security debris screen.
- Insect seal: Full perimeter seal.

Screen (surround) frame: 70 x 20 mm.

Screen fixings: Tamper resistant fixings for securing the base frame to window perimeter to the manufacturer's recommendations.

Wire surface clearance: Provide projection so that wire clearance from glazing is not less than the rate of instantaneous deflection measured during testing, 105 mm optimum.

Escape latching: Provide keyless exit in event of an emergency, for the full width of the screen, which is inaccessible from outside the building.

Gravity self-centring hook: Provide hook to hang screen from rafter or eaves when in the fully open position.

- Hook material: 6 mm galvanized steel rod.

Marking: Provide the manufacturer's name in 3 mm high letters on the internal face of the frame using one of the following methods:

- Embossing the frame.
- Adhesive, transparent acrylic, untearable polyester film label.

# 0551 JOINERY

# 1 PRODUCTS

# 1.1 WARDROBE, CUPBOARD AND DRAWER UNITS

Add subclause as follows.

#### Wall recessed wardrobes - sliding door

Built-in wardrobe: Provide wardrobe consisting of the following:

- Wheel system: Metal ball bearing rollers.
- Door panels: 16 mm thick, melamine finished.
  - . Maximum width: 1200 mm.
- Mirror door panels: Grade A pure silver safety mirror fixed to door panels enclosed on all sides with rubber gaskets.
- Hanging rails.
- Interiors: 16 mm thick high moisture resistant particleboard or MDF.
  - . Colour: White.
- Melamine shelving and units.
- Frame colour: White.

# 0572 MISCELLANEOUS FIXTURES AND APPLIANCES

#### 1 PRODUCTS

# 1.1 APPLIANCES

#### Cooking appliances

Amend subclause text as follows.

Rangehoods

- Type: Stainless steel 900 mm wide with dual fan, as documented.
- Flue: As documented to suit rangehood model.

# 0702 MECHANICAL

#### 1 AIR CONDITIONING SYSTEMS

Add clause as follows.

#### 1.1 GENERAL

#### General

Requirement: If documented, provide air conditioning system to HOUSING PART C: CONSTRUCT SPECIFICATION.

#### 2 EVAPORATIVE COOLING SYSTEMS

# 2.1 GENERAL

# General

Requirement: If documented, provide evaporative cooling system to HOUSING PART C: CONSTRUCT SPECIFICATION.

# 2.2 INSTALLATION

# **Bushfire resistance**

Inset subclause text as follows.

Non-combustible mesh covers: If used, provide covers as follows:

- Metallic housings: Cover air intakes and other openings larger than 2 mm.
- Plastic and other combustible housings: Fully enclose the cooler.

# **0802 HYDRAULIC**

# 1 EXECUTION

# 1.1 COLD AND HEATED WATER

# Water heaters

Insert additional text to subclause as follows.

Labelling: Engrave 'GOVERNMENT REGIONAL OFFICERS' HOUSING' in 12 mm high lettering, at the top right hand side of the rear panel.

# Solar and heat pump systems

Insert additional text to subclause as follows.

Solar water heater booster switch, electrical booster element: Single phase with thermostatic and manual control, one shot booster switch as recommended by the water heater manufacturer.

Switch location: Adjacent to the load centre.
 Provide flush plate permanently marked 'WATER HEATER'.

#### 1.2 GAS

Add subclause as follows.

#### Gas room heater and outlet

Heater connection: Flexible hose connection to a gas bayonet fitting. Gas outlet location to suit reticulation and wall and ceiling vent requirements.

Convection room heater capacity: Minimum 21 MJ.

Labelling: Engrave 'GOVERNMENT REGIONAL OFFICERS' HOUSING' in 12 mm high lettering, at the top right hand side of the rear panel.

Controls: Top mounted with piezo or electronic ignition.

Gas outlets: Provide as follows:

- Type: Recessed, flush fitting, wall mounted, and chromium plated bayonet outlets.
- Gas flued heater: Where required, provide a gas point inside a No. 1 valve box, in the ground, outside the building, adjacent to the heater.
- Valve: Quarter turn valve capped to the network utility operator's requirement at the outlet for future connection.

Valve box lid: To AS/NZS 5601.1, finished flush with ground level or the top of concrete or paving.

Above ground gas points: To be 130 mm above floor level and 100 mm (centreline) to the right of flued heater.

Recessing of gas points: Install in an electrical plaster wall box with a blank plate. Gas supply to be blanketed off, back plated and elbow fixed in the recess

Gas lines chased into walls: To be vertical and within 1 m from the floor.

# 0902 ELECTRICAL

# 1 EXECUTION

#### 1.1 GENERAL

Add subclause as follows.

# Labelling

Electrical water heater: Engrave 'GOVERNMENT REGIONAL OFFICERS' HOUSING' in 12 mm high lettering, at the top right hand side.

Electric room heater: Electrical water heater: Engrave 'GOVERNMENT REGIONAL OFFICERS' HOUSING' in 12 mm high lettering, at the top right hand side of the rear panel.

#### 1.2 LIGHTING

#### Luminaires

Insert additional text to subclause as follows.

Downlight luminaire: Recessed, fully enclosed downlight luminaire with white ceiling trim.

- Body: Powder coat finished zinc-coated steel body with porcelain ES lamp holder, teflon cable and terminal block.
- Lamp: 100 W GLS incandescent lamp. Bottom of lamp to finish flush with luminaire trim.
- Ceiling cut-out: Maximum 140 mm diameter.

#### 1.3 TELECOMMUNICATIONS

Add subclause as follows.

# **Telephone outlets**

Outlet 1, telephone assembly: White, wall mounted unit in the kitchen, fitted at 1.5 m above the finished floor level consisting of telephone outlet, cover plate, concealed minimum 20 mm diameter white PVC-U conduit from wall box to 150 mm above ceiling and a connection point at or near the front site boundary.

Outlet 2, for computer internet access: Locate as documented.

# REFERENCED DOCUMENTS

The following documents are incorporated into this worksection by reference:

AS 3727		Pavements
AS 3727.1	2016	Residential
AS 4773		Masonry in small buildings
AS 4773.1	2015	Design
AS/NZS 5601		Gas installations
AS/NZS 5601.1	2013	General installations
BCA 3.1.4.4	2019	Acceptable construction - Site preparation - Termite risk management - Durable notices
BCA 3.12.3.4	2019	Acceptable solutions - Energy efficiency - Building sealing - Exhaust fans



99 Plain Street, East Perth, WA 6004 www.housing.wa.gov.au