General Notes for Residential Works

Revised May 2022

General Notes (NCC 2022 BCA Vol 2)

. All building and plumbing practices shall comply with, but not limited to the Building Regulations 2018, National Construction Code Series 2022 Building Code of Australia Vol 2 and all relevant current Australian Standards (as amended) referred to there in.

. Unless otherwise specified, the term BCA shall refer to National Construction Code Series 2022 Building Code of Australia Volume 2.

. All materials and construction practice shall meet the Performance Requirements of the BCA. Where an alternative solution is proposed then, prior to implementation or installation, it first must be assessed and approved by the Relevant Building Surveyor as meeting the Performance Requirements of the BCA.

. Glazing, including safety glazing, shall be installed to a size, type and thickness so as to comply with:
- BCA Part 8 for Class 1 and 10 Buildings within a design wind speed of not more than N3; and
- NCC 2022 BCA Vol 1 Part B1D4 for Class 2 and 9 Buildings.

. Waterproofing of wet areas being bathrooms, showers, shower rooms, laundries, sanitary compartments and the like shall be provided in accordance with AS 3740-2010:
Waterproofing of Domestic Wet Areas.

Artificial lighting to comply with Section J 3.12.5.5 of the National Construction Code (NCC) as follows:
- 5W/m2 for habitable spaces in a dwelling
- 4W/m2 for a non-habitable room
- 3W/m2 for a hallway, stairway or the like

. These Drawings shall be read in conjunction with any House Energy Rating (HERS) report and shall be constructed in accordance with the stamped plans endorsed by the accredited Thermal Performance Assessor without alteration.

. Step sizes (other than for spiral stairs) to be:
- Risers (R) 190mm maximum and 115mm minimum
- Going (G) 355mm maximum and 240mm minimum
- 2R + 1G = 700mm maximum and 550mm minimum
- with less than 125mm gap between open treads.

ENERGY EFFICIENCY REQUIREMENTS:
A minimum 2000L rainwater tank connected to all toilets, laundry and garden taps OR a gas boosted solar hot water unit in accordance with plumbing regulations is required to be installed to the dwelling.

. All treads, landings and the like to have a slip-resistance classification of P3 or R10 for dry surface conditions and P4 or R11 for wet surface conditions, or a nosing strip with a slip-resistance classification of P3 for dry surface conditions and P4 for wet surface conditions.

. Provide barriers where change in level exceeds 1000mm above the surface beneath landings, ramps and/or treads. Barriers (other than tensioned wire barriers) to be:
- 1000mm min. above finished surface level of balconies, landings or the like, and
- 865mm min. above finished surface level of stair nosing or ramp, and
- Vertical with less than 125mm gap between, and
- Any horizontal element within the barrier between 150mm and 760mm above the floor must not facilitate climbing where changes in level exceeds 4000mm above the surface beneath landings, ramps and/or treads. Wire barrier construction to comply with NCC 2022 BCA Part 11.3.6 for Class 1 and 10 Buildings and NCC 2022 BCA Volume 1 Part D3D17 for other Classes of Buildings.

. Top of hand rails to be minimum 865mm vertically above stair nosing and floor surface of ramps.

. Window sizes nominated are nominal only. Actual size may vary according to manufacturer. Windows to be flashed all around. Where the building (excludes a detached Class 10) is located in a termite prone area the building is to be provided with a termite management system.

. Concrete stumps:
- up to 1400mm long to be 100mm x 100mm (1 No. H.D. Wire)
- 1401mm to 1800mm long to be 100mm x 100mm (2 No. H.D. Wires)
- 1801mm to 3000mm long to be 125mm x 125mm (2 No. H.D. Wires)
- 100mm x 100mm stumps exceeding 1200mm above ground level to be braced where no perimeter base brickwork provided.

NOTE: THE BUILDER IS TO ENSURE THAT THE SITING OF THE BUILDING COMPLIES WITH THE APPROVED PLANS

. Buildings in marine or other exposure environments shall have masonry units, mortar and all built in components and the like complying with the durability requirements of Table 4.1 of AS 4773.1-2015 'Masonry in small buildings' Part 1: Design.

. All stormwater to be taken to the legal point of discharge to the Relevant Authorities approval.

. These drawings shall be read in conjunction with all relevant structural and all other consultants' drawings/ details and with any other written instructions issued in the course of the contract.

. Site plan measurements in metres – all other measurements in millimetres unless noted otherwise.

. Figured dimensions take precedence over scaled dimensions.

. The Builder shall take all steps necessary to ensure the stability and general water tightness of all new and/or existing structures during all works.

. The Builder and Subcontractors shall check and verify all dimensions, setbacks, levels and specifications and all other relevant documentation prior to the commencement of any works. Report all discrepancies to this office for clarification.

. Installation of all services shall comply with the respective supply authority requirements.

. The Builder and Subcontractor shall ensure that all stormwater drains, sewer pipes and the like are located at a sufficient distance from any buildings footing and/ or slab edge beams so as to prevent general moisture penetration, dampness, weakening and undermining of any building and its footing system.

. **These plans have been prepared for the exclusive useby the Client of [A T ARCDESIGN PTY LTD) for the purpose expressly notified to the Designer. Any other person who uses or relies on these plans without the Designer's written consent does so at their own risk and no responsibility is accepted by the Designer for such use and/or reliance.**

. **The Client and/or the Client's Builder shall not modify or amend the plans without the knowledge and consent of [A T ARCDESIGN PTY LTD] except where a Registered Building Survey or makes minor necessary changes to facilitate the Building Permit application and that such changes are promptly reported back to [A T ARCDESIGN PTY LTD] .**

. **The approval by this office of a substitute material, work practice, variation or the like is not an authorisation for its use or a contract variation. All variations must be accepted by all parties to the agreement and where applicable the Relevant Building Surveyor prior to implementing any variation.**

. **(soil classification relocated)**

STORMWATER

[Insert stormwater size] mm DIA. Class 6 UPVC stormwater line laid to a minimum grade of 1:100 and connected to the legal point of stormwater discharge. Provide inspection openings at 9000mm C/C and at each change of direction.The cover to underground stormwater drains shall be not less than
- 100mm under soil
- 50mm under paved or concrete areas
- 100mm under unreinforced concrete or paved driveways
- 75mm under reinforced concrete driveways

SITE ENVIRONMENT DESIGN INFORMATION
Site Bushfire Attack Assessment (simplified method)

Reference document 'AS 3959-2009 construction of buildings in bush fire prone areas'
Relevant Fire Danger Index (FDI)-[Insert]
Predominate vegetation:- Classification-[Insert vegetation classification)

Type-[Site Vegetation Insert TYPE]

Distance of site from predominate vegetation-[Insert]
Effective slope of land-[Insert]
Determination of Bushfire Attack Level (BAL)-[Insert BAL]

Site Classification

Site classification as Class:
Refer to soil report No:
By:

Design Gust Wind Speed / Wind Classification

Building tie-downs to be provided in accordance with AS1684-2010 for an assumed design gust wind speed / wind classification of [Insert wind speed or wind classification] (subject to confirmation on site by Relevant Building Surveyor at first inspection) refer to AS1684 for construction requirements.

- Stormwater drainage to be in accordance with AS3500.3.

- Gutters & downpipes to be installed in accordance with AS3500.5.

- Wall claddings and metal roof coverings to be in accordance with AS156.1-2022 and AS1562.2-2022.

- Balcony waterproofing membrane materials and installation to be in accordance with AS4654.1-2012 and AS4654.2-2012.

- All openable windows serving a bedroom with a fall greater than 2000mm from FFL to the surface below are to be provided with a device capable of restricting the window opening to a maximum of 125mm and resist an outward horizontal force of 250N. Window openings above 1700mm from finished floor level are not required to be restricted.

- Where open showers (i.e. frameless/semi-frameless) are proposed, the bathroom floor is required to be graded to the floor waste, with grade between 1:60-1:80, where located within 1500mm of the shower rose. Confirm on plans shower rose, drains and grades on all floor plans or provide typical detail illustrating compliance (AS3740 Figures 3.1A, 3.5, C1 & C2 - Figure C2 in particular)

PROVIDE WALL TIES TO BRICKWORK AT MAX 600mm CTRS, IN EACH DIRECTION & WITHIN 300mm OF ARTICULATION JOINTS AS PER SOIL REPORT & ENGINEERS COMPUTATIONS.

SUB FLOOR VENTILATION OPENINGS IN EXTERNAL AND INTERNAL WALLS CLEARANCE BETWEEN THE UNDERSIDE OF BEARERS TO FINISHED GROUND LEVEL MUST CONFORM WITH THE RELEVANT CLAUSES OF THE BUILDING CODE OF AUSTRALIA 2018. REFER TO SOIL REPORT & ENG'S COMPUTATIONS.

EXACT LOCATION OF WATER METER, GAS METER, METER BOX, FUSE BOX, HOT WATER UNIT, HEATING UNITS TO BE DETERMINED ON SITE WITH THE RELEVANT AUTHORITIES.

LIGHT FITTINGS AND SWITCHES GENERALLY TO BE EQUALLY SPACED AND CENTERED OR AS INDICATED.

LAUNDRIES, BATHROOMS, ENSUITS AND POWDER ROOMS THAT ARE NOT NATURALLY VENTILATED, SHALL BE PROVIDED WITH MECHANICAL VENTILATION, TO National Construction Code Series 2019 Building Code of Australia Volume 2.
AND LOCAL GOVERNMENT'S VENTILATION CODE.

CHIMNEYS OR FLUES SHALL EXTEND 300mm ABOVE ANY PART OF A BUILDING WITHIN A HORIZONTAL DISTANCE OF 3.6m.

IF THE THRESHOLD SILL OF THE DOORWAY IS GREATER THAN 190mm ABOVE THE FINISHED SURFACE OF THE GROUND TO WHICH THE DOORWAY OPENS, A LANDING SHALL BE PROVIDED NO LESS THAN THE WIDTH OF THE DOOR LEAF.

SMOKE DETECTERS SHALL BE A 240V SELF CONTAINED SMOKE ALARM OR EQUIVALENT, CONNECTED TO THE CONSUMER POWER MAINS IN ACCORDANCE WITH AS 3786. AND BE INTERCONNECTED AS PER A.S. 2014

THE SITE SHALL BE ADEQUATELY FENCED OFF DURING CONSTRUCTION TO PREVENT PUBLIC ACCESS.

NO PART OF THE BUILDING SHALL PROJECT BEYOND THE BOUNDARY LINE I.E. INCLUDING MOULDS, ARCHITECTURAL FEATURES AND THE LIKE (FOOTINGS, AG DRAINS, ECT).

RAINWATER HEADS, FASCIAS, GUTTERS, DOWN PIPES AND THE LIKE WITHIN 450mm OF THE BOUNDARY SHALL BE CONSTRUCTED OF NON COMBUSTABLE MATERIAL.

OPENINGS IN EXTERNAL WALLS WITHIN 900mm FROM THE SIDE FACING BOUNDARY REQUIRE TO BE PROTECTED, I.E. WINDOWS SHALL BE FIXED, FIRE RATED WINDOWS NO LESS THAN 60/60/60

SAFTY GLAZING TO BE USED IN THE FOLLOWING CASES:
(1) ALL ROOMS - WITHIN 500mm VERTICAL OF FLOOR LEVEL
(2) BATHROOMS - WITHIN 2000mm VERTICAL FROM BATH BASE
- WITHIN 500mm HORIZONTAL FROM BATH/SHOWER TO SHOWER DOORS, SHOWER SCREENS AND BATH ENCLOSURES
(3) LAUNDRY - WITHIN 1200mm VERTICAL FROM FLOOR LEVEL AND /OR WITHIN 300mm VERTICAL OF TROUGH
(4) DOORWAYS - WITHIN 300mm HORIZONTAL FROM ALL DOORS
(5) ENSUITE - AS FOR (2)

The Building Code of Australia (BCA) requires all new class 1a dwellings to be provided with either:
a.2000 Litre Rainwater Tank connected to all sanitary flushing facilities or;
b. Solar Hot Water Service
*The rainwater tank must have a minimum capacity of 2000 litres and have a roof Catchment area of at least 50 square metres.
**The solar hot water unit must achieve an energy efficiency level of 60%.

PROPOSED 4 UNIT TWO STOREY DWELLINGS @ 167 RATHCOWN RD, RESERVOIR FOR OSMOND HYLTON

ARCDESIGN	**NOTES:** Do not scale: Contractors must verify all dimensions on site before commencing any work or preparing shop drawings which must be approved by the superintendant before manufacture. Any extra entailed in work shown on this drawing must be claimed and approved before proceeding. © copyright 2024: these drawings are not to be copied in part or in whole with out the written concent of the author	**PROJECT/ADRESS** 4 x Double Storey Unit Development. 167 Rathcown Road, Reservoir	**REVISIONS** Prelim SK-1	**DATE:** 28/04/21	**SHEET SIZE:** A2
		CLIENT OSMOND HYLTON	TP ENDORSED 29/10/24 BP 20/12/24	**JOB NO:** 123	**SCALE:** AS NOTED
		PROPRIETOR A T ARCDESIGN PTY LTD	E: info@atarchitecturedesign.com T:9499 1212	**DRAW:** **DATE:** 26.02.2025	**DRAWING NO:** 01

UNIT 1		
AREA:	m²	sq.
ground floor:	82.7	8.9
car space:	23.3	2.51
porch:	1.12	0.12
patio:	14.45	1.55
upper floor:	62	6.67
TOTAL:	141.17	15.2

UNIT 2		
AREA:	m²	sq.
ground floor:	33.3	3.9
car space:	19.87	2
porch:	0.83	0.09
patio:	4.5	0.48
upper floor:	44.2	4.96
TOTAL:	106.2	11.46

UNIT 3		
AREA:	m²	sq.
ground floor:	51.0	5.4
garage:	34.6	3.72
porch:	1.07	0.11
patio:	7	0.75
upper floor:	54.0	5.8
TOTAL:	147.67	15.8

UNIT 4		
AREA:	m²	sq.
ground floor:	35.8	3.85
car space:	20.7	2.2
porch:	1	0.10
patio:	6	0.64
upper floor:	35.7	3.8
TOTAL:	99.2	10.6

AREA ANALYSIS	
SITE AREA:	743.22m²
BUILT UP AREA:	270.0m²
CONCRETE AREA:(118.81m2)	
388.8 m2	
PERMEABLE AREA (41.6m2)	
396.0m2	
SITE COVERAGE:	36.0%
PERMIBILITY:	53%
GARDEN AREA 35% OF SITE AREA = 260.12m²	
PROPOSED GARDEN AREA= (309.67m²)	
TOTAL:	**494.54m² 53.23sq.**

BUILDING PERMIT
Building Act 1993 Building Regulations 2018
PERMIT NUMBER: 603573127782
DATE ISSUED: 01/04/2025
ARKI BUILDING SURVEYORS PTY LTD

INSPECTION BOOKING
Inspections@arkibs.com.au
TEL: 9687 0333
MIN. 24 HOURS NOTICE REQUIRED

STORM RATING NOTES

Dwelling 1
The rainwater from Dwelling 1 roof area of 63.8m2 is to be collected and discharged via a gravity fed system into a 2000L capacity rainwater tank which is to be connected to all toilets for toilet flushing.

Dwelling 2
The rainwater from Dwelling 2 roof area of 54.9m2 is to be collected and discharged via a gravity fed system into a 2000L capacity rainwater tank which is to be connected to all toilets for toilet flushing.

Dwelling 3
The rainwater from Dwelling 3 roof area of 88.7m2 is to be collected and discharged via a gravity fed system into a 2500L capacity rainwater tank which is to be connected to all toilets for toilet flushing.

Dwelling 4
The rainwater from Dwelling 4 roof area of 37.6m2 is to be collected and discharged via a gravity fed system into a 2000L capacity rainwater tank which is to be connected to all toilets for toilet flushing.

RAINGARDEN NOTES:

ROOF CATCHMENT AREA OF 9.5m2 FROM **DWELLING 1** TO BE HARVESTED INTO A MIN 1.0m2 ABOVE GROUND PLANTERBOX TYPE RAINGARDEN, WHICH IS TO BE FULLY LINED AND HAVE THE AGGIE DRAIN AND OVERFLOW PLUMBED TO THE STORMWATER SYSTEM

1.00 m²
RAINGARDEN

DRIVEWAY UNTREATED AREA 130.6M2

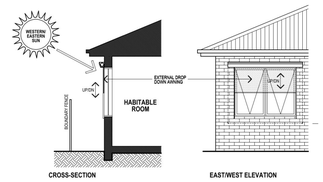
Note: Please refer to attached BESS report for calculation & STAR Ratings

Double glazing to all habitable areas

PROPOSED UNIT RAINWATER COLLECTION
EACH RWT IS TO BE CONNECTED TO ALL TOILETS IN THAT DWELLING FOR TOILET FLUSHING
IN ACCORDANCE WITH ENDORSED STORM REPORT
UNIT 1: 33.67m2 ROOF TO 2000L RAIN WATER TANK
UNIT 2: 54.3m2 ROOF TO 2000L RAIN WATER TANK
UNIT 3: 86.04m2 ROOF TO 2500L RAIN WATER TANK
UNIT 4: 61.04m2 ROOF TO 2000L RAIN WATER TANK
SDA NOTES:
- SHOWERHEADS: MIN. 4 STAR WELS (>=6.0 BUT <=7.5) TO BE INSTALLED PROJECT WIDE.
- KITCHEN & BATH TAPS: MIN. 5 STAR WELS TO BE INSTALLED PROJECT WIDE.
- TOILETS: MIN. 4 STAR WELS TO BE INSTALLED PROJECT WIDE.
- WATER EFFICIENT LANDSCAPING TO BE INSTALLED PROJECT WIDE.
- GAS SPACE HEATING SYSTEM: MIN. 4 STAR TO BE INSTALLED PROJECT WIDE.
- REFRIGERATIVE COOLING SYSTEM: MIN. 4 STAR TO BE INSTALLED PROJECT WIDE.
- HOT WATER SYSTEM: GAS INSTANTANEOUS MIN. 5 STAR TO BE INSTALLED TO EACH DWELLING.
- EXTERNAL LIGHTING TO BE CONTROLLED BY MOTION DETECTORS.
- INTERNAL LIGHTING IS NOT TO EXCEED A MAX. ILLUMINATION POWER DENSITY OF 4W/SQ M.
- CROSSFLOW VENTILATION IS TO BE ACHIEVED ACROSS ALL HABITABLE ROOMS AS PER BESS REPORT.
- ALL GLAZED DOORS & WINDOWS TO HABITABLE ROOMS/AREAS TO BE AT MIN. DOUBLE GLAZED AS PER BESS REPORT.
- EACH DWELLING TO HAVE ONE SECURE BICYCLE SPACE PROJECT WIDE.
- EACH DWELLING HAS A LVL 2 32 AMP GPO DESIGNATED FOR EV CAR CHARGING
- 35% OF THE SITE USED FOR VEGETATION AND LANDSCAPING
- ALL DWELLINGS TO ACHIEVE NATHERS STAR RATINGS IN EXCESS OF 6 STAR & AVERAGE OF
6.5 STARS AS NOMINATED IN THE REPORT
- A COMMITMENT TO RECYCLE/REUSE MIN. 70% OF ALL CONSTRUCTION AND DEMOLITION WASTE

SHADING DEVICES- TO ALL GROUND FLOOR WEST FACING HABITABLE WINDOWS

TYPICAL EXTERNAL OPERABLE SHADING DEVICE ASD
NOT TO SCALE



ADJUSTABLE SHADING DIAGRAM [DROP-DOWN AWNING]

NOTE: SITE IS FLAT

NOTE:
ADJACENT P.O.S TO BE PROTECTED FROM OVER VIEWING WITH A 1800h TIMBER PAILING FENCE

NOTE:
MATERIALS, COLOURS AND TEXTURES ARE SELECTED TO HIGHLIGHT THE ARCHITECTURAL FORMS AND REFLECT THE ADJACENT DWELLINGS

NOTE:
BREAK UP LARGE FORMS WITH ARTICULATED DIMENTIONS IN PLAN AND ELEVATION, TO MAINTAIN A SCALE RELEVENT TO THE ADJOINING BUILDING.

LEDGEND

- LETTER BOX
- HWS — HOT WATER SERVICE
- MB — METER BOX
- RBN — RUBISH BIN
- R.BIN — RECYCLE BIN
- HW — HABITAL WINDOW
- NHW — NON HABITAL WINDOW
- G — GAS METER
- CL — CLOTHES LINE
- RWT — RAIN WATER TANK
- A/C HU — AIRCONDITION / HEATING UNIT
- SOLAR PANELS

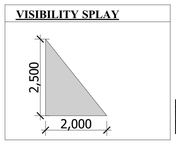
P.O.S No.94 (NOT VISIBLE) (CROOKSTON ROAD)
setback more than 9m
H 18
3,300 SRZ
10,200 TPZ
ADJ. GARAGE
PROPOSED FENCE IS A HARDWOOD PICKET FENCE TO CREATE 25% TRANSPARENCY FOR A NICE PRESENCE TO THE STREET
EXISTING GALVANISED IRON 1.7m HIGH
EXISTING BRICK WALL 1.8m HIGH
ALLOTMENT BOUNDARY 48.77M (187°30'45")
EXISTING BRICKWALL 1m HIGH
P.O.S
CONCRETE
No.169
ADJ. SINGLE STOREY BRICK HOUSE
TILED PITCHED ROOF
VERANDAH
GRASSED FRONTYARD
COLOURBOND
8,402 APPROX
4,345 APPROX
CONCRETE DRIVEWAY
STEEL PICKETS 1.6m HIGH HEDGE
TELSTRA PIT
ELECTRICITY POLE
INVERT
GRASSED
CONCRETE
EXISTING CONCRETE CROSSING
T.B.M. RIVET IN KERB RL 94.35
OF
No.3/92
ADJ. SINGLE STOREY BRICK UNIT
TILED PITCHED ROOF
(CROOKSTON ROAD)
1,087 APPROX
DRAINAGE & SEWERAGE EASEMENT 3.05m WIDE
PROPOSED 1.8M T.P.F
ALLOTMENT BOUNDARY 48.24M (277°30'45")
S.P.O.S - 55.1M2
S.P.O.S - 56.5M2
7,535 SETBACK
6,090 SETBACK
DWELLING 4
A.H.D/F.F.L 94.80
DWELLING 3
A.H.D/F.F.L 94.80
DWELLING 2
A.H.D/F.F.L 94.80
DWELLING
A.H.D/F.F.L 94.80
LIVING
DINING
KITCHEN
PATIO
PORCH
ENTRY
L'DRY
PDR
GARAGE
5.5 X 6.0
BICYCLE SPACE
SELECTED OPEN CAR PORT
SELECTED EXPOSED AGGREGATE
PERMEABLE AREA
21.00 m²
2.6 X 4.9 CAR SPACE
SELECTED CONCRETE DRIVEWAY
MOTION DETECTOR LIGHTING ON POSTS FOR WALKWAYS
SENSOR LIGHTING MOTION DETECTORS ON WALLS FACING THE DRIVEWAYS
SENSOR LIGHTING MOTION DETECTORS ON WALLS FACING THE DRIVEWAYS
2100h x 5200w sectional panel lift door
WALL MOUNTED BICYCLE SPACE
S.P.O.S - 3.4M2
SELECTED EXPOSED AGGREGATE NO ROOF PERMEABLE AREA
SELECTED OPEN CAR SPACES
SELECTED OPEN CAR SPACE
3,500
A.H.D/F.F.L 94.50
2.6 X 4.9 CAR SPACE
PROPOSED 1.8M T.P.F PROPOSED GATE
S.P.O.S - 52M2
P.O.S - 3.4M2
TOTAL - 55.4M2
S.P.O.S - 40M2
40M2
GAS M RELOCATED
PROPOSED 1.8M MATRIX FINISH CONTEMPORARY FENCE
PERMEABLE AREA TO BE GRASSCRETE
RAINGARDEN
3.00 m²
EXISTING TREE REMOVED
PIER ON OUR PROPERTY REMOVED
FRONT FENCE REMOVED
NATURE STRIP
POLE WITH LIGHT
SPEED HUMP E
6,000 TPZ
ALLOTMENT BOUNDARY 48.77M (187°30'45")
EXISTING 1.7m HIGH T.P.F
PROPOSED 1.8M T.P.F
48.77
PALINGS 0.7m HIGH
3,700 APPROX
CONCRETE DRIVEWAY
EXISTING CONCRETE CROSSING
NOT FENCED
FOOTPATH
STRIP
KERB
PROPERTY OUTLET
8,801 APPROX
No.165/1
ADJ. SINGLE STOREY BRICK HOUSE
TILED PITCHED ROOF
No.165/2
ADJ DOUBLE STOREY BRICK /RENDERED HOUSE
TILED PITCHED ROOF
No.165/3
ADJ DOUBLE STOREY BRICK /RENDERED HOUSE
TILED PITCHED ROOF
SHARED CARPORT
CONCRETE DRIVEWAY
ADJ. GALVANISED IRON SHED
GALVANISED IRON SHED
P.O.S No.90 (CROOKSTON ROAD)
setback more than 9m
4,230 APPROX
5,740 APPROX
P.O.S
P.O.S
P.O.S
RATHCOWN ROAD

NOTE:
BINS TO BE WHEELED INTO SPOS AREAS NOT VISIBLE FROM STREET AFTER COLLECTION
UNIT 1 TO HAVE IT BEHIND THE TREES AND PLANTING

NOTE:
ALL EASTERN,SOUTHERN and WESTERN BOUNDARY FENCES TO BE EXTENDED TO 1.8M HIGH

NOTE:
VISIBILITY SPLAYS TO EITHER SIDE OF THE CROSSOVER IN ACCORDANCE WITH CLAUSE 52.06-9 (EXCEPT WHERE THIS CANNOT BE ACHIEVED BY EXISTING STRUCTURES ON ADJOINING PROPERTIES)

VISIBILITY SPLAY



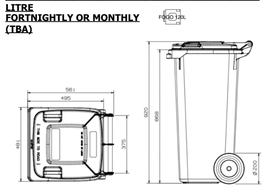
NOTE-
Infrastructure and cabling (with or without the charger unit) to each garage or carport that can support Level 2 (Mode 3) 32 Amp EV car charging.

1 SECURE BICYCLE SPACE PER DWELLING TO BE SHOWN

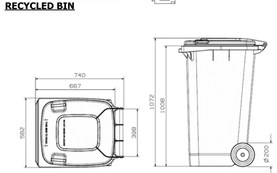
BINS TO BE WHEELED ONTO NATURE STRIP FOR COLLECTION PRIOR TO COLLECTION DAY

NOTE:
General waste will be collected by Council once a week; Recyclable/FOGO will be collected on alternating weeks on a fortnightly basis.

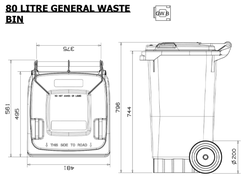
120 LITRE GLASS WASTE BIN & FOGO WASTE BIN 120 LITRE FORTNIGHTLY OR MONTHLY (TBA)



240 LITRE WHEELIE BIN RECYCLED BIN



80 LITRE GENERAL WASTE BIN



SITE LAYOUT / GROUND FLOOR PLAN

SCALE 1:100

NOTES:
Do not scale: Contractors must verify all dimensions on site before commencing any work or preparing shop drawings which must be approved by the superintendent before manufacture. Any extra entailed in work shown on this drawing must be claimed and approved before proceeding

PROJECT/ADRESS	REVISIONS	DATE:	SHEET SIZE:	A1
4 x Double Storey Unit Development. 167 Rathcown Road, Reservoir	Prelim SK-1	28/04/21	JOB NO:	123
CLIENT	TP ENDORSED	29/10/24	SCALE:	AS NOTED
OSMOND HYLTON	BP	20/12/24	DRAWN:	
PROPRIETOR			DATE:	26.02.2025
A T ARCDESIGN PTY LTD	E: info@atarchitecturedesign.com T:9499 1212		DRAWING NO:	02

UNIT 1		
AREA:	m²	sq.
ground floor:	58.2	6.33
car space:	23.3	2.51
porch:	1.2	0.12
patio:	14.45	1.55
upper floor:	62	6.67
TOTAL:	141.17	15.2

UNIT 2		
AREA:	m²	sq.
ground floor:	33.3	3.9
car space:	19.87	2
porch:	0.83	0.09
patio:	4.5	0.48
upper floor:	44.2	4.96
TOTAL:	106.2	11.46

UNIT 3		
AREA:	m²	sq.
ground floor:	51.0	5.4
garage:	34.6	3.72
porch:	1.07	0.11
patio:	7	0.75
upper floor:	54.0	5.8
TOTAL:	147.67	15.8

UNIT 4		
AREA:	m²	sq.
ground floor:	35.8	3.85
car space:	20.7	2.2
porch:	1	0.10
patio:	6	0.64
upper floor:	35.7	3.8
TOTAL:	99.2	10.6

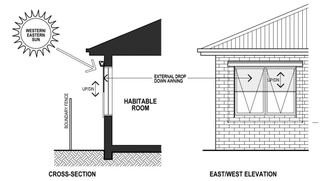
AREA ANALYSIS	
SITE AREA:	743.22m²
BUILT UP AREA:	270.0m²
CONCRETE AREA:(118.81m2) 388.8 m2	
PERMEABLE AREA (41.6m2) 396.0m2	
SITE COVERAGE:	36.0%
PERMIBILITY:	53%
GARDEN AREA 35% OF SITE AREA = 260.12m²	
PROPOSED GARDEN AREA= (309.67m²)	
TOTAL:	**494.54m² 53.23sq.**

BUILDING PERMIT
BUILDING ACT 1993 Building Regulations 2018
PERMIT NUMBER: 30357312778 DATE ISSUED: 01/04/2022
APAI BUILDING SURVEYORS PTY LTD

INSPECTION BOOKING
EMAIL inspections@arkibs.com.au
TEL: 9887 0333
MIN. 24 HOURS NOTICE REQUIRED

SHADING DEVICES- TO ALL GROUND FLOOR WEST FACING HABITABLE WINDOWS

TYPICAL EXTERNAL OPERABLE SHADING DEVICE (OS)
NOT TO SCALE



ADJUSTABLE SHADING DIAGRAM [DROP-DOWN AWNING]

STORM RATING NOTES

Dwelling 1
The rainwater from Dwelling 1 roof area of 63.8m2 is to be collected and discharged via a gravity fed system into a 2000L capacity rainwater tank which is to be connected to all toilets for toilet flushing.

Dwelling 2
The rainwater from Dwelling 2 roof area of 54.9m2 is to be collected and discharged via a gravity fed system into a 2000L capacity rainwater tank which is to be connected to all toilets for toilet flushing.

Dwelling 3
The rainwater from Dwelling 3 roof area of 88.7m2 is to be collected and discharged via a gravity fed system into a 2500L capacity rainwater tank which is to be connected to all toilets for toilet flushing.

Dwelling 4
The rainwater from Dwelling 4 roof area of 37.6m2 is to be collected and discharged via a gravity fed system into a 2000L capacity rainwater tank which is to be connected to all toilets for toilet flushing.

RAINGARDEN NOTES:

ROOF CATCHMENT AREA OF 9.5m2 FROM **DWELLING 1** TO BE HARVESTED INTO A MIN 1.0m2 ABOVE GROUND PLANTERBOX TYPE RAINGARDEN, WHICH IS TO BE FULLY LINED AND HAVE THE AGGIE DRAIN AND OVERFLOW PLUMBED TO THE STORMWATER SYSTEM

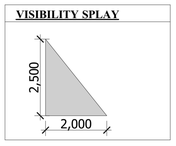
DRIVEWAY UNTREATED AREA 130.6M2

Note: Please refer to attached BESS report for calculation & STAR Ratings

Double glazing to all habitable areas

PROPOSED UNIT RAINWATER COLLECTION
EACH RWT IS TO BE CONNECTED TO ALL TOILETS IN THAT DWELLING FOR TOILET FLUSHING
IN ACCORDANCE WITH ENDORSED STORM REPORT
UNIT 1: 33.67m2 ROOF TO 2000L RAIN WATER TANK
UNIT 2: 54.3m2 ROOF TO 2000L RAIN WATER TANK
UNIT 3: 86.04m2 ROOF TO 2500L RAIN WATER TANK
UNIT 4: 61.04m2 ROOF TO 2000L RAIN WATER TANK
SDA NOTES:
- SHOWERHEADS: MIN. 4 STAR WELS (>=6.0 BUT <=7.5) TO BE INSTALLED PROJECT WIDE.
- KITCHEN & BATH TAPS: MIN. 5 STAR WELS TO BE INSTALLED PROJECT WIDE.
- TOILETS: MIN. 4 STAR WELS TO BE INSTALLED PROJECT WIDE.
- WATER EFFICIENT LANDSCAPING TO BE INSTALLED PROJECT WIDE.
- GAS SPACE HEATING SYSTEM: MIN. 4 STAR TO BE INSTALLED PROJECT WIDE.
- REFRIGERATIVE COOLING SYSTEM: MIN. 4 STAR TO BE INSTALLED PROJECT WIDE.
- HOT WATER SYSTEM: GAS INSTANTANEOUS MIN. 5 STAR TO BE INSTALLED TO EACH DWELLING.
- EXTERNAL LIGHTING TO BE CONTROLLED BY MOTION DETECTORS.
- INTERNAL LIGHTING IS NOT TO EXCEED A MAX. ILLUMINATION POWER DENSITY OF 4W/SQ M.
- CROSSFLOW VENTILATION IS TO BE ACHIEVED ACROSS ALL HABITABLE ROOMS AS PER BESS REPORT.
- ALL GLAZED DOORS & WINDOWS TO HABITABLE ROOMS/AREAS TO BE AT MIN. DOUBLE GLAZED AS PER BESS REPORT.
- EACH DWELLING TO HAVE ONE SECURE BICYCLE SPACE PROJECT WIDE.
- EACH DWELLING HAS A LVL 2 32 AMP GPO DESIGNATED FOR EV CAR CHARGING
- 35% OF THE SITE USED FOR VEGETATION AND LANDSCAPING
- ALL DWELLINGS TO ACHIEVE NATHERS STAR RATINGS IN EXCESS OF 6 STAR & AVERAGE OF 6.5 STARS AS NOMINATED IN THE REPORT
- A COMMITMENT TO RECYCLE/REUSE MIN. 70% OF ALL CONSTRUCTION AND DEMOLITION WASTE

VISIBILITY SPLAY



NOTE-
Infrastructure and cabling (with or without the charger unit) to each garage or carport that can support Level 2 (Mode 3) 32 Amp EV car charging.

1 SECURE BICYCLE SPACE PER DWELLING TO BE SHOWN

NOTE:
Prior to commencement of works, the following provisions relating to the protection of existing street trees must be undertaken to the satisfaction of the Responsible Authority:

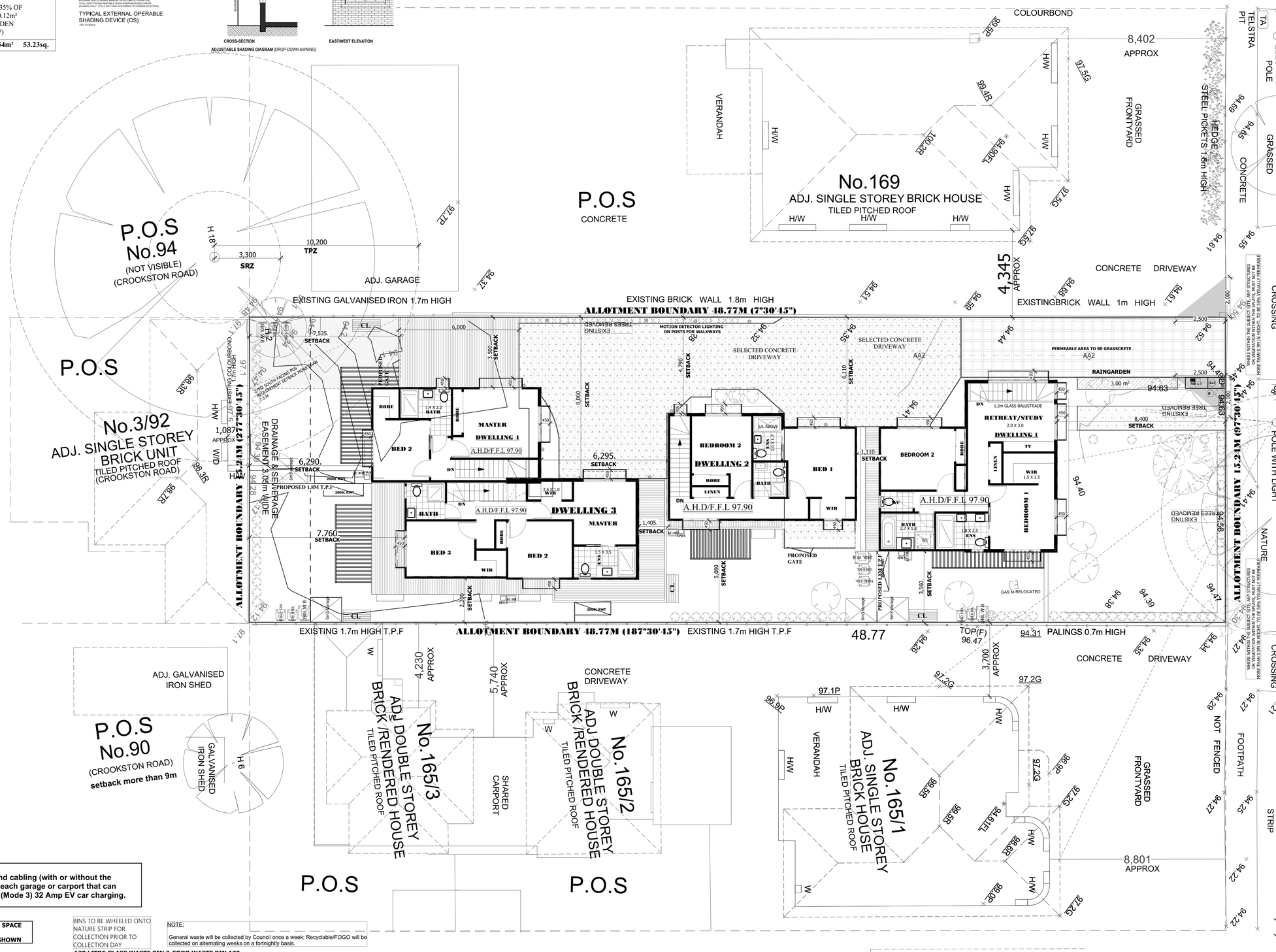
i) A suitable Tree Protection Zone of 2.5m-metre radius with barrier fence must be established around the street tree/s on the RATHCOWN STREET frontage.

ii) The Protection Zone must be enclosed using a 2.0 metre high temporary cyclone fence or similar, which must remain in place through all stages of the development. This fence must not enclose the footpath, which must be kept clear for pedestrian access, and a sign must be erected on the fence informing that the fence is a Tree Protection Zone'.

iii) The Area within the Tree Protection Zone must not be disturbed by any means including, parking of vehicles or storage of plant and equipment, materials, soil or waste.

iv) No excavation is allowed within the Tree Protection Zone except with the consent of Council's Town Planning Department and under the supervision of a qualified Arborist.

All grass and weed within the Tree Protection Zone must be removed and the area mulched and irrigated.



LEDGEND
- LETTER BOX
- HWS — HOT WATER SERVICE
- MB — METER BOX
- BIN — RUBISH BIN
- R.BIN — RECYCLE BIN
- HW — HABITAL WINDOW
- NHW — NON HABITAL WINDOW
- G — GAS METER
- CL — CLOTHES LINE
- RWT — RAIN WATER TANK
- AC/HP — AIRCONDITION / HEATING UNIT
- SOLAR PANELS

NOTE: SITE IS FLAT

NOTE:
ADJACENT P.O.S TO BE PROTECTED FROM OVER VIEWING WITH A 1800h TIMBER PAILING FENCE

NOTE:
MATERIALS, COLOURS AND TEXTURES ARE SELECTED TO HIGHLIGHT THE ARCHITECTURAL FORMS AND REFLECT THE ADJACENT DWELLINGS

NOTE:
BREAK UP LARGE FORMS WITH ARTICULATED DIMENTIONS IN PLAN AND ELEVATION, TO MAINTAIN A SCALE RELEVENT TO THE ADJOINING BUILDING.

NOTE:
WHERE WITHIN THE SUBJECT SITE, ANY STRUCTURES ARE LOCATED WITHIN 3.5M OF A BOUNDARY AND MORE THAN 0.9M IN HEIGHT, TO BE 50% VISUALLY PERMEABLE

NOTE:
BINS TO BE WHEELED INTO SPOS AREAS NOT VISIBLE FROM STREET AFTER COLLECTION
UNIT 1 TO HAVE IT BEHIND THE TREES AND PLANTING

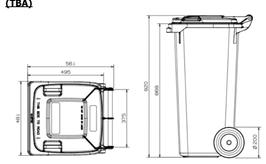
NOTE:
ALL EASTERN,SOUTHERN and WESTERN BOUNDARY FENCES TO BE EXTENDED TO 1.8M HIGH

NOTE:
VISIBILITY SPLAYS TO EITHER SIDE OF THE CROSSOVER IN ACCORDANCE WITH CLAUSE 52.06-9
(EXCEPT WHERE THIS CANNOT BE ACHIEVED BY EXISTING STRUCTURES ON ADJOINING PROPERTIES)

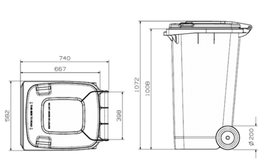
BINS TO BE WHEELED ONTO NATURE STRIP FOR COLLECTION PRIOR TO COLLECTION DAY

NOTE:
General waste will be collected by Council once a week; Recyclable/FOGO will be collected on alternating weeks on a fortnightly basis.

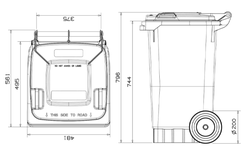
120 LITRE GLASS WASTE BIN & FOGO WASTE BIN 120 LITRE FORTNIGHTLY OR MONTHLY (TBA)



240 LITRE WHEELIE BIN RECYCLED BIN



80 LITRE GENERAL WASTE BIN



SITE LAYOUT / FIRST FLOOR PLAN

SCALE 1:100

NOTES:	PROJECT/ADRESS	REVISIONS	DATE:	SHEET SIZE:	A1
Do not scale. Contractors must verify all dimensions on site before commencing any work or preparing shop drawings which must be approved by the superintendant before manufacture. Any extra entailed in work shown on this drawing must be claimed and approved before proceeding	4 x Double Storey Unit Development. 167 Rathcown Road, Reservoir	Prelim SK-1	28/04/21	JOB NO:	123
	CLIENT	TP ENDORSED	29/10/24	SCALE:	AS NOTED
	OSMOND HYLTON	BP	20/12/24	DRAWN	
	PROPRIETOR			DATE:	26.02.2025
© copyright 2024 these drawings are not to be copied in part or in whole with out the written consent of the author	A T ARCDESIGN PTY LTD	E: info@atarchitecturedesign.com T:9499 1212		DRAWING NO:	03

UNIT 1			UNIT 2			UNIT 3			UNIT 4		
AREA:	m²	sq.	AREA:	m²	sq.	AREA:	m²	sq.	AREA:	m²	sq.
ground floor:	40.22	4.33	ground floor:	33.3	3.9	ground floor:	51.0	5.4	ground floor:	35.8	3.85
car space:	23.3	2.51	car space:	19.87	2	garage:	34.6	3.72	car space:	20.7	2.2
porch:	1.2	0.12	porch:	0.83	0.09	porch:	1.07	0.11	porch:	1	0.10
patio:	14.45	1.55	patio:	4.5	0.48	patio:	7	0.75	patio:	6	0.64
upper floor:	62	6.67	upper floor:	44.5	4.96	upper floor:	54.0	5.8	upper floor:	35.7	3.8
TOTAL:	141.17	15.2	TOTAL:	106.5	11.46	TOTAL:	147.67	15.8	TOTAL:	99.2	10.6

AREA ANALYSIS

SITE AREA:	743.22m²
BUILT UP AREA:	270.0m²
CONCRETE AREA:(118.81m2) 388.8 m2	
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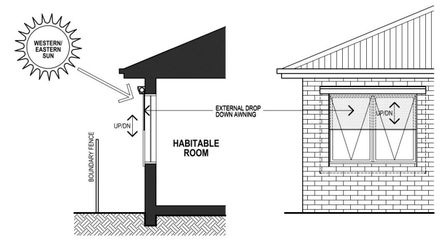
TOTAL:	**494.54m² 53.23sq.**

SHADING DEVICES- TO ALL GROUND FLOOR WEST FACING HABITABLE WINDOWS

EXTERNAL ROLLER BLINDS (MANUAL OR AUTOMATIC OPERATION) TO ALL WEST FACING HABITABLE ROOM WINDOWS/GLAZED DOORS (EXAMPLE ONLY - STYLE MAY VARY ACCORDING TO OWNERS SELECTION)

TYPICAL EXTERNAL OPERABLE SHADING DEVICE ASD
NOT TO SCALE



ADJUSTABLE SHADING DIAGRAM [DROP-DOWN AWNING]

GENERAL LEGEND

- DENOTE LIFT OFF / REMOVABLE HINGES: IF CENTER OF THRESHOLD IS LESS THAN 1.2M FROM FRONT EDGE OF SANITY FITTINGS
- S.D — DENOTE SMOKE ALARM HARD WIRED & INTERCONNECTED TO MAINS WITH BACKUP BATTERY AS PER B.C.A REQUIREMENTS
- EF — DENOTE EXHAUST FAN, MECHANICAL VENTILATION FROM ENS, POWDER ROOM AND L'DRY TO BE DUCTED TO OUTSIDE AIR
- AJ — DENOTE ARTICULATION JOINT IN BRICKWORK @ 5000 MAX. SPACING & AS PER SOIL REPORT
- C/S — CAVITY SLIDING DOOR
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- GH — DENOTE LOCATION OF GAS HEATER
- FP — DENOTE LOCATION OF FIRE PLACE
- FFL — DENOTE FINISHED FLOOR LEVEL (AHD)
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- DENOTE 100mm UPVC SWD TO BE CONNECTED TO LEGAL POINT OF DISCHARGE (LPOD) AND TO THE APPROVAL OF THE RELEVENT LOCAL AUTHORITY

NOTE:
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FOUNDATION CLASSIFICATION
"CLASS "" A.S. 2870-1996

REFER TO ENGINEERS SOIL REPORT TO CONFIRM
REFER TO ENGINEERS COMP'S FOR SLAB DESIGN

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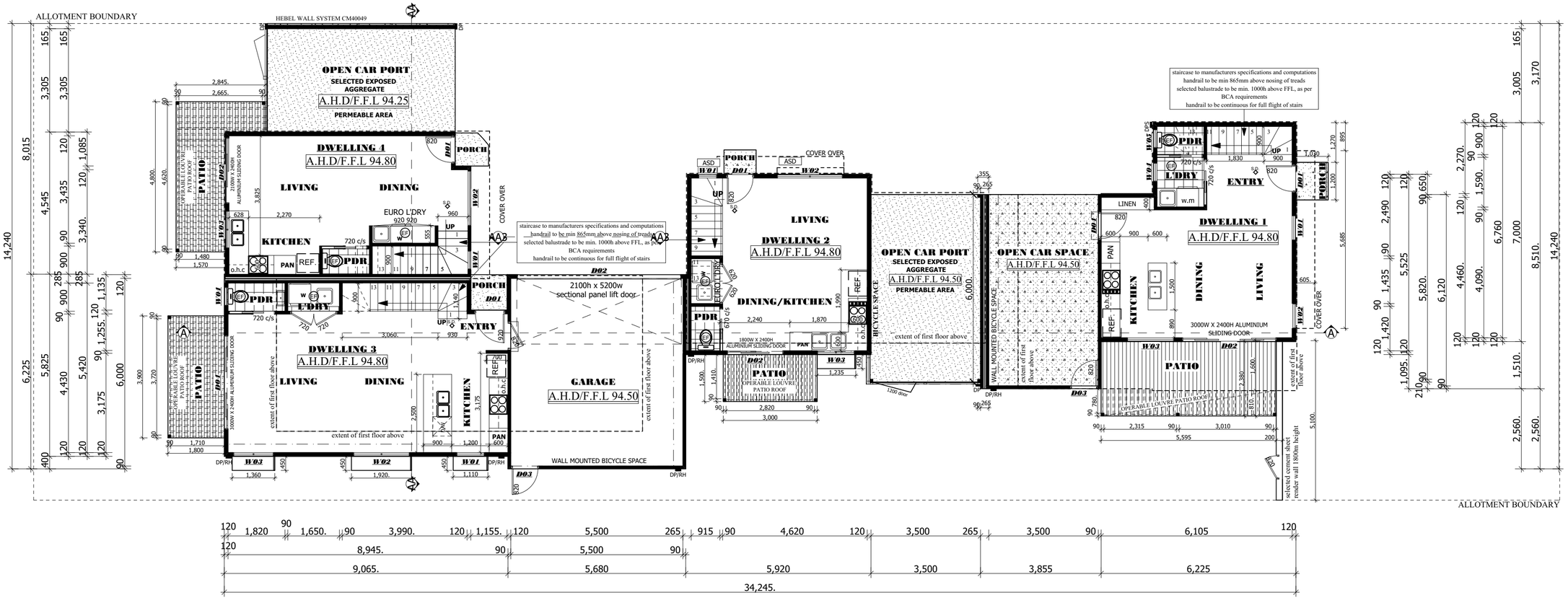

NOTE:
FIREHECK to the underside of all porches and patios .

NOTE:
all upper-level windows have a 125mm restrictor.

NOTE:
PLIABLE BUILDING MEMBRANE FOR EXTERNAL WALLS TO COMPLY WITH AS/NZS 4200.1 AND BE INSTALLED IN ACCORDANCE WITH AS-NZS 4200.2.

NOTE:
GLAZING, INCLUDING MIRRORS, WITHIN 2000MM ABOVE FINISHED FLOOR LEVEL IN BATHROOM AND ENSUITES SHALL BE GRADE A SAFETY GLASS.

NOTE: BRICK ARTICULATION JOINTS WERE LOCATED AT OPENING (WINDOWS/DOORS)
MUST RUN CONTINUOUSLY PER AS 4773

DENOTES THE LOCATION OF EXHAUST FANS. DUCT ALL EXHAUST FANS EXTERNALLY.
1000mm HORIZONTAL DUCT - IN ACCORDANCE WITH AS.1668. EXTERNAL DISCHARGE RATE MINIMUM 25l/S.

NOTE:
WET AREAS TO BE CONSTRUCTED IN ACCORDANCE WITH AS 3740-2022

NOTE:
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NOTE:
THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL RELEVANT STRUCTURAL, GEOTECHNICAL
AND ALL OTHER CONSULTANTS DRAWINGS/DETAILS AND WITH ANY OTHER WRITTEN INSTRUCTIONS
ISSUED IN THE COURSE OF THE CONTRACT.

NOTE:
ALL SMOKE ALARMS ARE TO BE INTERCONNECTED WITH EACH OTHER

NOTE:
ALL DOWN PIPE LOCATIONS TO BE CONFIRMED ON SITE BY BUILDER.

GROUND FLOOR PLAN

SCALE 1:100

NOTE:
all partiwalls nibs are fire rated.

NOTE:
PROVIDE LIFT OFF HINGERS TO ALL W.C DOORS

NOTE: RAINWATER TO BE CONNECTED TO ALL TOILET FLUSHING SYSTEMS

NOTE: ALL INTERNAL DOORS TO HAVE A HEIGHT OF 2340MM

ARCDESIGN

NOTES:
Do not scale:
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before commencing any work or preparing shop
drawings which must be approved by the superintendant before manufacture.
Any extra entailed in work shown on this drawing
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PROJECT/ADRESS	REVISIONS	DATE:	SHEET SIZE:	A2
4 x Double Storey Unit Development. 167 Rathcown Road, Reservoir	Prelim SK-1	28/04/21	JOB NO:	123
CLIENT	TP ENDORSED	29/10/24	SCALE:	AS NOTED
OSMOND HYLTON	BP	20/12/24	DRAW:	
PROPRIETOR			DATE:	26.02.2025
A T ARCDESIGN PTY LTD	E: info@atarchitecturedesign.com T:9499 1212		DRAWING NO:	04

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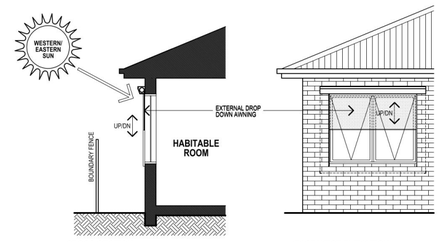

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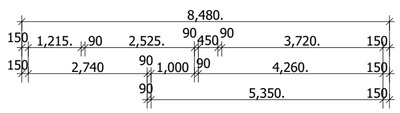

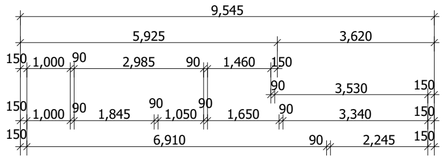

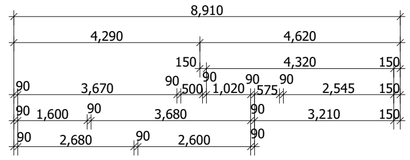

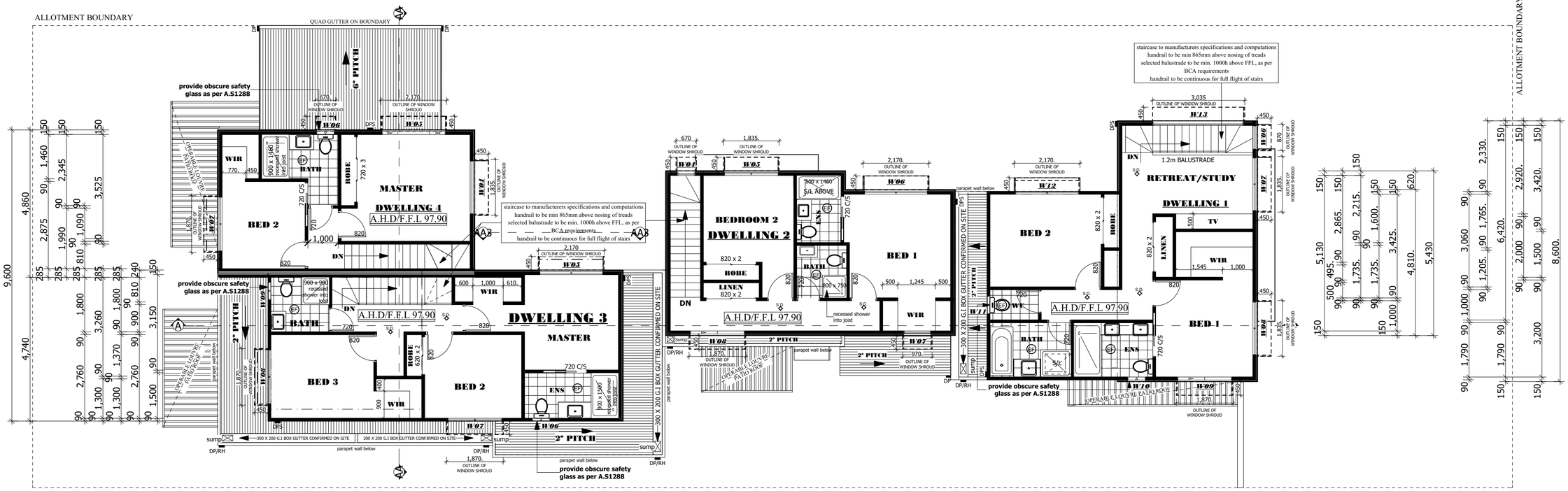

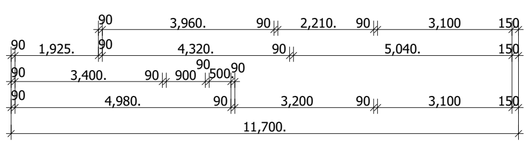

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NOTE:
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NOTE:
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AND ALL OTHER CONSULTANTS DRAWINGS/DETAILS AND WITH ANY OTHER WRITTEN INSTRUCTIONS
ISSUED IN THE COURSE OF THE CONTRACT.

NOTE:
ALL SMOKE ALARMS ARE TO BE INTERCONNECTED WITH EACH OTHER

NOTE:
ALL DOWN PIPE LOCATIONS TO BE CONFIRMED ON SITE BY BUILDER.

FIRST FLOOR PLAN

SCALE 1:100

NOTE:
all partiwalls nibs are fire rated.

NOTE:
PROVIDE LIFT OFF HINGERS TO ALL W.C DOORS

NOTE: RAINWATER TO BE CONNECTED TO ALL TOILET FLUSHING SYSTEMS

NOTE: ALL INTERNAL DOORS TO HAVE A HEIGHT OF 2340MM

NOTES:
Do not scale:
Contractors must verify all dimensions on site
before commencing any work or preparing shop
drawings which must be approved by the superintendant before manufacture.
Any extra entailed in work shown on this drawing
must be claimed and approved before proceeding

PROJECT/ADRESS	REVISIONS	DATE:	SHEET SIZE:	A2
4 x Double Storey Unit Development. 167 Rathcown Road, Reservoir	Prelim SK-1	28/04/21	JOB NO:	123
CLIENT	TP ENDORSED	29/10/24	SCALE:	AS NOTED
OSMOND HYLTON	BP	20/12/24	DRAW:	
PROPRIETOR			DATE:	26.02.2025
A T ARCDESIGN PTY LTD	E: info@atarchitecturedesign.com T:9499 1212		DRAWING NO:	05

UNIT 1			UNIT 2			UNIT 3			UNIT 4		
AREA:	m²	sq.	AREA:	m²	sq.	AREA:	m²	sq.	AREA:	m²	sq.
ground floor:	40.22	4.33	ground floor:	33.3	3.9	ground floor:	51.0	5.4	ground floor:	35.8	3.85
car space:	23.3	2.51	car space:	19.87	2	garage:	34.6	3.72	car space:	20.7	2.2
porch:	1.2	0.12	porch:	0.83	0.09	porch:	1.07	0.11	porch:	1	0.10
patio:	14.45	1.55	patio:	4.5	0.48	patio:	7	0.75	patio:	6	0.64
upper floor:	62	6.67	upper floor:	44.5	4.96	upper floor:	54.0	5.8	upper floor:	35.7	3.8
TOTAL:	141.17	15.2	TOTAL:	106.5	11.46	TOTAL:	147.67	15.8	TOTAL:	99.2	10.6

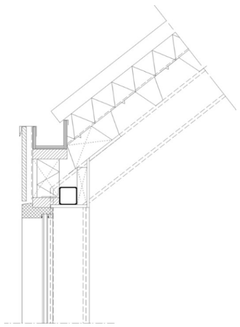
AREA ANALYSIS

SITE AREA:	743.22m²
BUILT UP AREA:	270.0m²
CONCRETE AREA:(118.81m2) 388.8 m2	
PERMEABLE AREA (41.6m2) 396.0m2	
SITE COVERAGE:	36.0%
PERMIBILITY:	53%
GARDEN AREA 35% OF SITE AREA = 260.12m² PROPOSED GARDEN AREA= (309.67m²)	
TOTAL:	**494.54m² 53.23sq.**

GENERAL LEDGEND

	DENOTE LIFT OFF / REMOVABLE HINGES: IF CENTER OF THRESHOLD IS LESS THAN 1.2M FROM FRONT EDGE OF SANITY FITTINGS
S.D	DENOTE SMOKE ALARM HARD WIRED & INTERCONNECTED TO MAINS WITH BACKUP BATTERY AS PER B.C.A REQUIREMENTS
EF	DENOTE EXHAUST FAN, MECHANICAL VENTILATION FROM ENS, POWDER ROOM AND L'DRY TO BE DUCTED TO OUTSIDE AIR
AJ	DENOTE ARTICULATION JOINT IN BRICKWORK @ 5000 MAX. SPACING & AS PER SOIL REPORT
C/S	CAVITY SLIDING DOOR
SL	SLIDING DOOR
BFD	BI-FOLD DOOR
DP	DENOTE LOCATION OF DOWNPIPE TOBE CONNECTED TO SWD SYSTEM
DPS	DENOTE LOCATION OF DOWNPIPE WITH SPREADER
GH	DENOTE LOCATION OF GAS HEATER
FP	DENOTE LOCATION OF FIRE PLACE
FFL	DENOTE FINISHED FLOOR LEVEL (AHD)
FGL	DENOTE FINISHED GROUND LEVEL (AHD)
	DENOTE 100mm UPVC SWD TO BE CONNECTED TO LEGAL POINT OF DISCHARGE (LPOD) AND TO THE APPROVAL OF THE RELEVENT LOCAL AUTHORITY

GUTTER ON WALL DETAIL



BOX GUTTER DETAIL

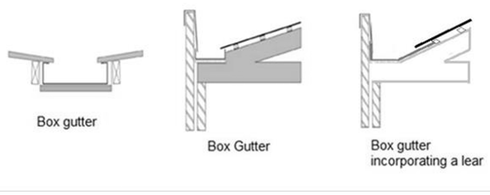
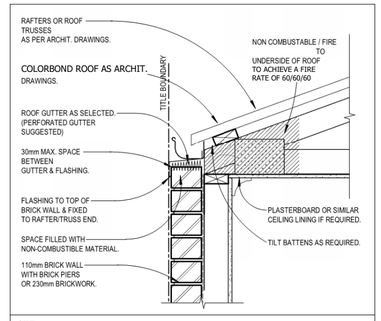


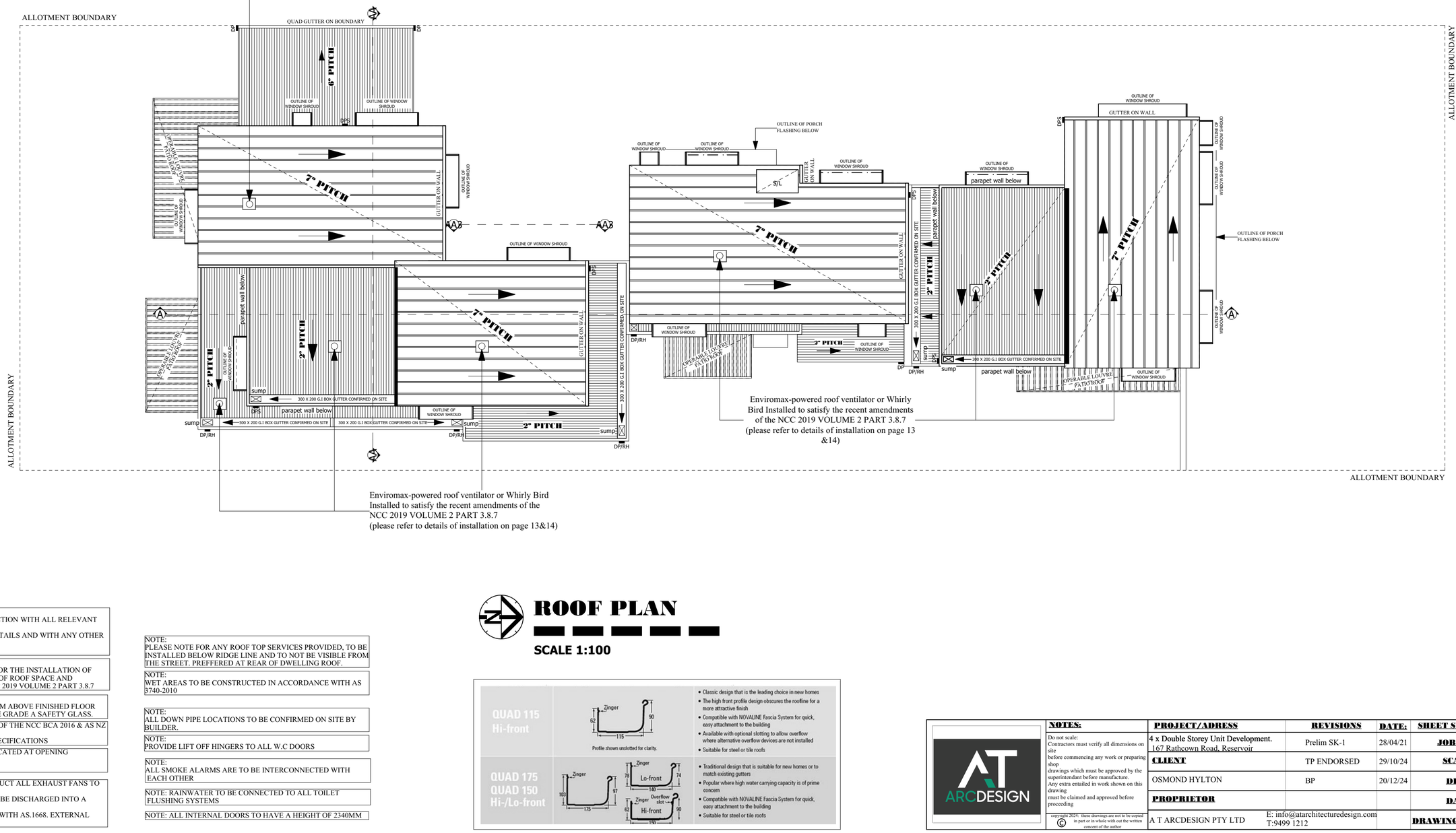
Figure 1: Typical examples of box gutters



NOTE:
- NO PORTION OF WALL OR STRUCTURE TO ENCROACH BOUNDARY
- AN INSPECTION IS REQUIRED PRIOR TO LINING

GARAGE WALL ON BOUNDARY DETAIL

Enviromax-powered roof ventilator or Whirly Bird Installed to satisfy the recent amendments of the NCC 2019 VOLUME 2 PART 3.8.7 (please refer to details of installation on page 13&14)



Enviromax-powered roof ventilator or Whirly Bird Installed to satisfy the recent amendments of the NCC 2019 VOLUME 2 PART 3.8.7 (please refer to details of installation on page 13 &14)

Enviromax-powered roof ventilator or Whirly Bird Installed to satisfy the recent amendments of the NCC 2019 VOLUME 2 PART 3.8.7 (please refer to details of installation on page 13&14)

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NOTE:
CONDENSATION MANAGEMENT, PROVISIONS FOR THE INSTALLATION OF WATER CONTROL MEMBRANES, VENTILATION OF ROOF SPACE AND DISCHARGE OF EXHAUST SYSTEMS AS PER NCC 2019 VOLUME 2 PART 3.8.7

NOTE:
GLAZING, INCLUDING MIRRORS, WITHIN 2000MM ABOVE FINISHED FLOOR LEVEL IN BATHROOM AND ENSUITES SHALL BE GRADE A SAFETY GLASS.

NOTE: GAS FIRE PLACE TO COMPLY WITH 3.7.3 OF THE NCC BCA 2016 & AS NZ 2918.
OWNER TO COMPLY WITH MANUFACTURES SPECIFICATIONS

NOTE: BRICK ARTICULATION JOINTS WERE LOCATED AT OPENING (WINDOWS/DOORS)
MUST RUN CONTINUOUSLY PER AS 4773

DENOTES THE LOCATION OF EXHAUST FANS. DUCT ALL EXHAUST FANS TO OUTSIDE AIR WHERE POSSIBLE -
OR, AN EXHAUST FAN OF RATING 140/S MIN TO BE DISCHARGED INTO A VENTILATED ROOF SPACE WITH MIN
1000mm HORIZONTAL DUCT - IN ACCORDANCE WITH AS.1668. EXTERNAL DISCHARGE RATE MINIMUM 25l/S.

NOTE:
PLEASE NOTE FOR ANY ROOF TOP SERVICES PROVIDED, TO BE INSTALLED BELOW RIDGE LINE AND TO NOT BE VISIBLE FROM THE STREET. PREFFERED AT REAR OF DWELLING ROOF.

NOTE:
WET AREAS TO BE CONSTRUCTED IN ACCORDANCE WITH AS 3740-2010

NOTE:
ALL DOWN PIPE LOCATIONS TO BE CONFIRMED ON SITE BY BUILDER.

NOTE:
PROVIDE LIFT OFF HINGERS TO ALL W.C DOORS

NOTE:
ALL SMOKE ALARMS ARE TO BE INTERCONNECTED WITH EACH OTHER

NOTE: RAINWATER TO BE CONNECTED TO ALL TOILET FLUSHING SYSTEMS

NOTE: ALL INTERNAL DOORS TO HAVE A HEIGHT OF 2340MM

ROOF PLAN

SCALE 1:100

NOTES:	PROJECT/ADRESS	REVISIONS	DATE:	SHEET SIZE:	A2
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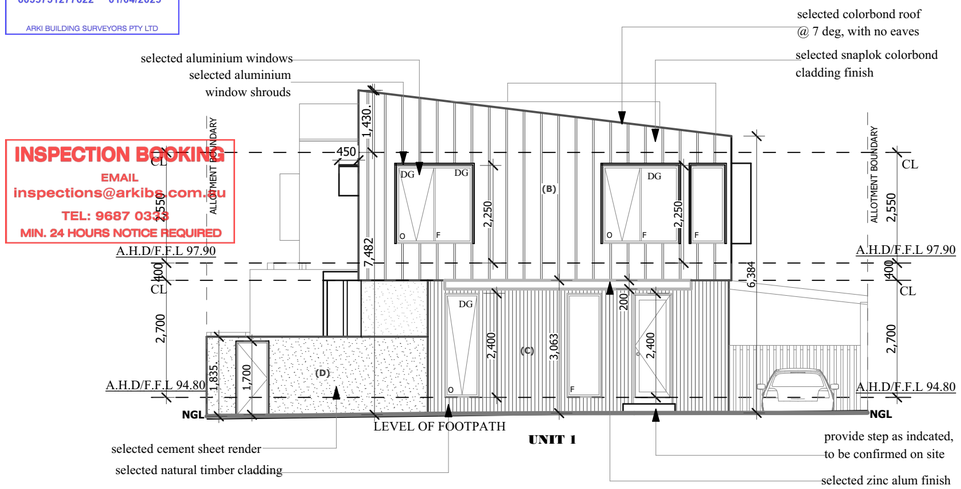
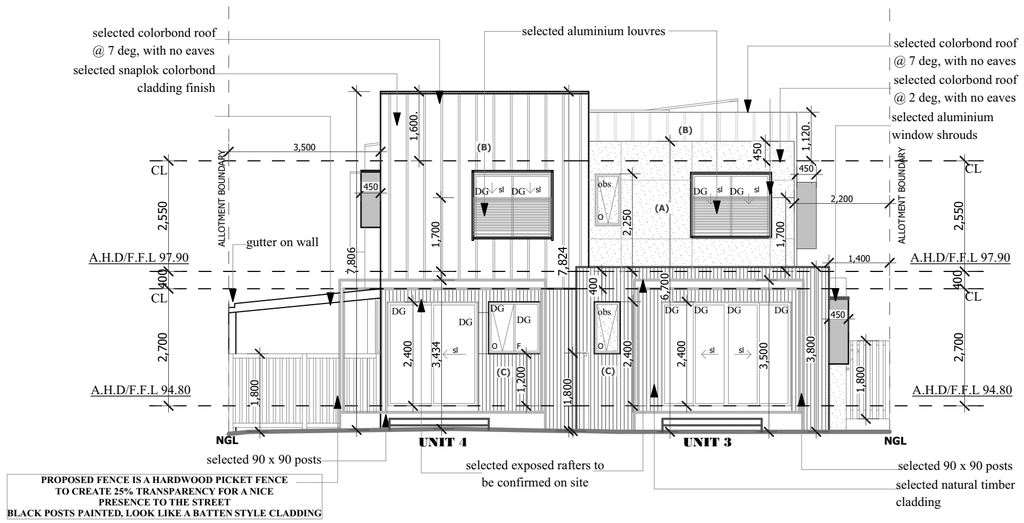
	CLIENT	TP ENDORSED	29/10/24	SCALE:	AS NOTED
	OSMOND HYLTON	BP	20/12/24	DRAW:	
	PROPRIETOR			DATE:	26.02.2025
	A T ARCDESIGN PTY LTD E: info@atarchitecturedesign.com T:9499 1212			DRAWING NO:	06

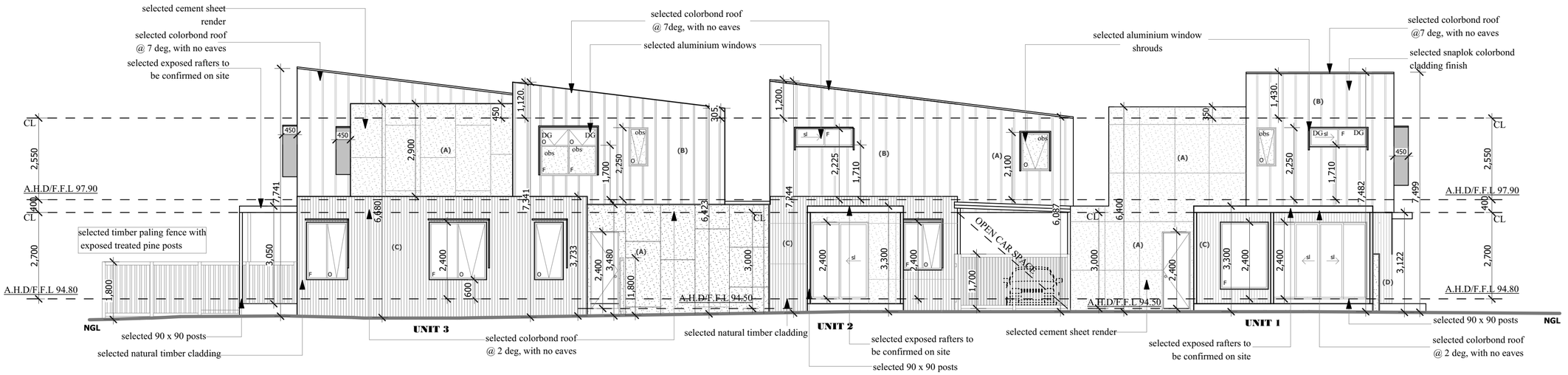


NORTH ELEVATION
SCALE: 1:100



PROPOSED FENCE IS A HARDWOOD PICKET FENCE TO CREATE 25% TRANSPARENCY FOR A NICE PRESENCE TO THE STREET BLACK POSTS PAINTED, LOOK LIKE A BATTEN STYLE CLADDING

SOUTH ELEVATION
SCALE: 1:100

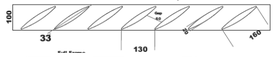


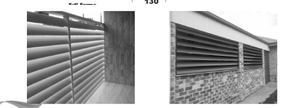
EAST ELEVATION
SCALE: 1:100

EXTERNAL OVERLOOKING SCREENING

eco AWNINGS — 160mm fixed welded Louvers

* Frames are 100x50 box aluminium with internal welds
* Louver are a 160x20 elliptical aluminium blade
* Powder coated in Dulux or Interpon colours
* Blade can be up to 3000mm long without centre supports
* Each panels can be made up to 4000x1600
* All Louvers are custom made to suit your site
* we can make custom design Brackets to suit your site





eco AWNINGS
Roland Segaert 0405 53 38 39
1300 861 613
PO BOX 254 Cherrybrook NSW 2126
www.ecoawnings.com.au
Sales@ecoawnings.com.au
Lic No 252747C

NOTE:
FIRST FLOOR WINDOWS SILL HEIGHTS OF HIGHLIGHT WINDOWS TO BE MIN 1.7M ABOVE F.F.L IN ACCORDANCE WITH STANDARD B22.

REFER TO IMAGES ON MATERIAL SCHEDULE FOR ALL UNITS' FENCES

PROPOSED FENCE IS A HARDWOOD PICKET FENCE TO CREATE 25% TRANSPARENCY FOR A NICE PRESENCE TO THE STREET BLACK POSTS PAINTED, LOOK LIKE A BATTEN STYLE CLADDING

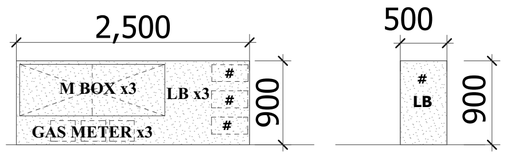
MATERIALS SCHEDULE

ITEM	COLOURS
WALLS EXTERNAL SURFACE	(A) Cement sheet render- crisp white (B) Colorbond snaplock cladding - shale grey (C) natural vertical timber cladding- natural cedar color (D) Cement sheet render- Lexicon (light grey)
PERGOLA/POST	CRISP WHITE - TAUBMANS
WINDOWS SHROUDS AND LOUVERS	POWDERCOATED - SHALE GREY
WINDOWS / DOORS	POWDERCOATED - SHALE GREY
PANEL LIFT DOOR	NATURAL TIMBER CLADDING
CAPPING/GUTTERS/FACIA	MONUMENT (COLORBOND)
RAIN WATER TANK	SHALE GREY (COLORBOND)
CONCRETE DRIVEWAY	GREY CONCRETE
PERMEABLE DRIVEWAY	IMAGECRETE EXPOSED
ROOF COLORBOND	SHALE GREY (COLORBOND)

OBS - DENOTES, OBSCURED WINDOW

Double glazing to all habitable areas

LETTERBOX/SERVICES DETAIL



ARCDESIGN

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PROJECT/ADRESS	REVISIONS	DATE:	SHEET SIZE:	A2
4 x Double Storey Unit Development. 167 Rathcown Road, Reservoir	Prelim SK-1	28/04/21	JOB NO:	123
CLIENT	TP ENDORSED	29/10/24	SCALE:	AS NOTED
OSMOND HYLTON	BP	20/12/24	DRAW:	
PROPRIETOR			DATE:	26.02.2025
A T ARCDESIGN PTY LTD E: info@atarchitecturedesign.com T:9499 1212			DRAWING NO:	07

EXTERNAL OVERLOOKING SCREENING

eco AWNINGS

160mm fixed welded Louvers

* Frames are 100x50 box aluminium with internal welds
* Louver are a 160x20 elliptical aluminium blade
* Powder coated in Dulux or Interpon colours
* Blade can be up to 3000mm long without centre supports
* Each panels can be made up to 4000x1600
* All Louvers are custom made to suit your site
* we can make custom design Brackets to suit your site

TYPICAL EXTERNAL OPERABLE SHADING DEVICE - A/C

NOT TO SCALE

proposed external overlooking screening is to be fixed with a maximum 25% transparency to a height of 1.7m above FFL.

eco AWNINGS
Roland Segaert 0405 53 38 39
1300 860 673
PO BOX 254 Cherrybrook NSW 2126
www.ecoawnings.com.au
Sales@ecoawnings.com.au
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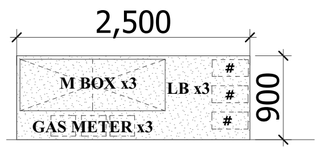
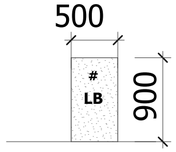
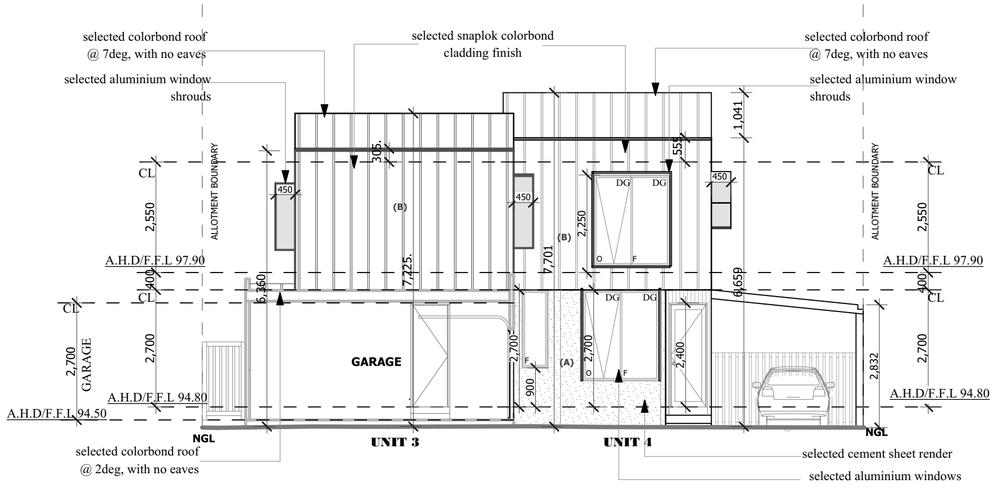
LETTERBOX/SERVICES DETAIL







INTERNAL NORTH ELEVATION

SCALE: 1:100

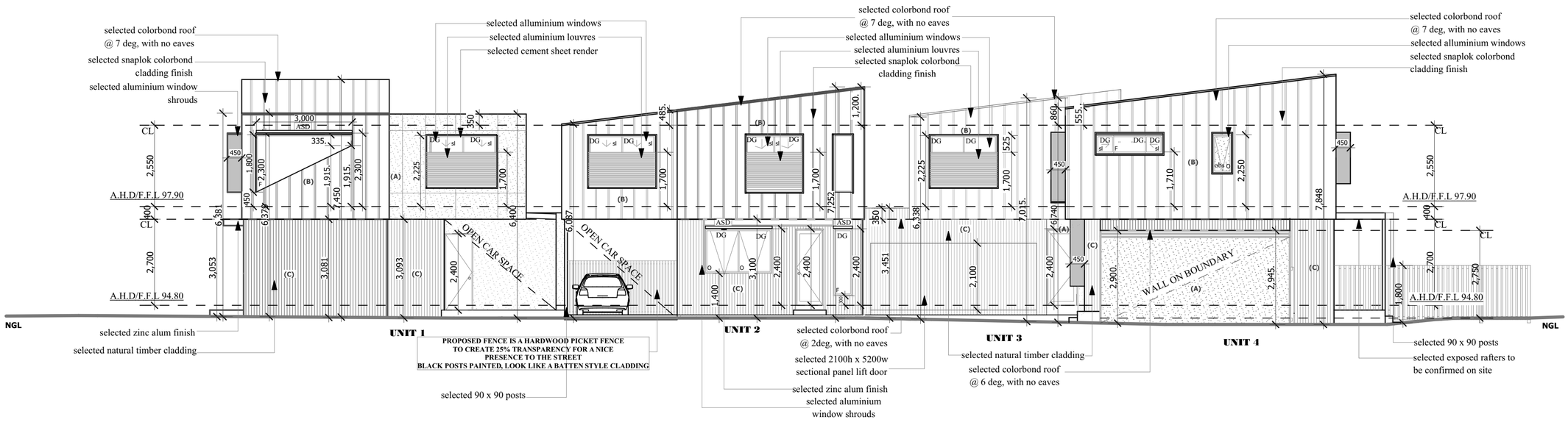
MATERIALS SCHEDULE

ITEM	COLOURS
WALLS EXTERNAL SURFACE	(A) Cement sheet render- crisp white (B) Colorbond snaplock cladding - shale grey (C) natural vertical timber cladding- natural cedar color (D) Cement sheet render- Lexicon (light grey)
PERGOLA/POST	CRISP WHITE - TAUBMANS
WINDOWS SHROUDS AND LOUVERS	POWDERCOATED - SHALE GREY
WINDOWS / DOORS	POWDERCOATED - SHALE GREY
PANEL LIFT DOOR	NATURAL TIMBER CLADDING
CAPPING/GUTTERS/FACIA	MONUMENT (COLORBOND)
RAIN WATER TANK	SHALE GREY (COLORBOND)
CONCRETE DRIVEWAY	GREY CONCRETE
PERMEABLE DRIVEWAY	IMAGECRETE EXPOSED
ROOF COLORBOND	SHALE GREY (COLORBOND)

OBS - DENOTES, OBSCURED WINDOW

NGL near boundary

Double glazing to all habitable areas



WEST ELEVATION

SCALE: 1:100

NOTE:
FIRST FLOOR WINDOWS SILL HEIGHTS OF HIGHLIGHT WINDOWS TO BE MIN 1.7M ABOVE F.F.L IN ACCORDANCE WITH STANDARD B22.

REFER TO IMAGES ON MATERIAL SCHEDULE FOR ALL UNITS' FENCES

PROPOSED FENCE IS A HARDWOOD PICKET FENCE TO CREATE 25% TRANSPARENCY FOR A NICE PRESENCE TO THE STREET BLACK POSTS PAINTED, LOOK LIKE A BATTEN STYLE CLADDING

ARCDESIGN

NOTES:

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PROJECT/ADRESS	REVISIONS	DATE:	SHEET SIZE:	A2
4 x Double Storey Unit Development. 167 Rathcown Road, Reservoir	Prelim SK-1	28/04/21	JOB NO:	123
CLIENT	TP ENDORSED	29/10/24	SCALE:	AS NOTED
OSMOND HYLTON	BP	20/12/24	DRAW:	
PROPRIETOR			DATE:	26.02.2025
A T ARCDESIGN PTY LTD E: info@atarchitecturedesign.com T:9499 1212			DRAWING NO:	08

FRAMING SPECIFICATIONS

(REFER TO A.S 1684 TIMBER FRAMING CODE)

Ceiling joist: 100 x 38 F8 @ 450 centres with maximun span of 2.3m

Hanging beams: (max spacing 2.3m)

125 x 38 F8 max span 2.1m
150 x 38 F8 max span 2.4m
200 x 38 F8 max span 3.2m
250 x 38 F8 max span 4.0m
300 x 38 F8 max span 4.8m
300 x 50 F8 max span 5.2m

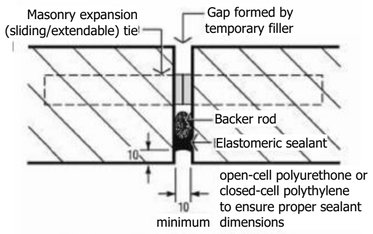
Collar ties to every second rafter pair: 100 x 38 F8, 4.2m max. span

Purlines and propes: 100 x 75 F8 placed in middle 1/3 of rafter

Rafters:
125 x 38 F8 @ 450 ctrs max span 2.2m single and 2.7m continuous

Ridges, hips and valleys
175 x 38 F8

Roof battens:
50 x 25 F8 @ 330 ctrs



ARTICULATION JOINT DETAIL

NOTES:

Garage top plates (above brick piers)
100 x 75 F8 HW tied down with metal hoop iron strapes. Min, 1200mm into brick piers @ 1500 ctrs max)

n.b - The builder may elect to use roof trusses in which case the design of the roof is to be carried out by the truss manufacturers

(in accordance with the B.C.A 3.3.4) weep holes must be created above any DPC or flashing @ centers not exceeding 1.2 & are not required for head or sill opening less than 1.0m wide.

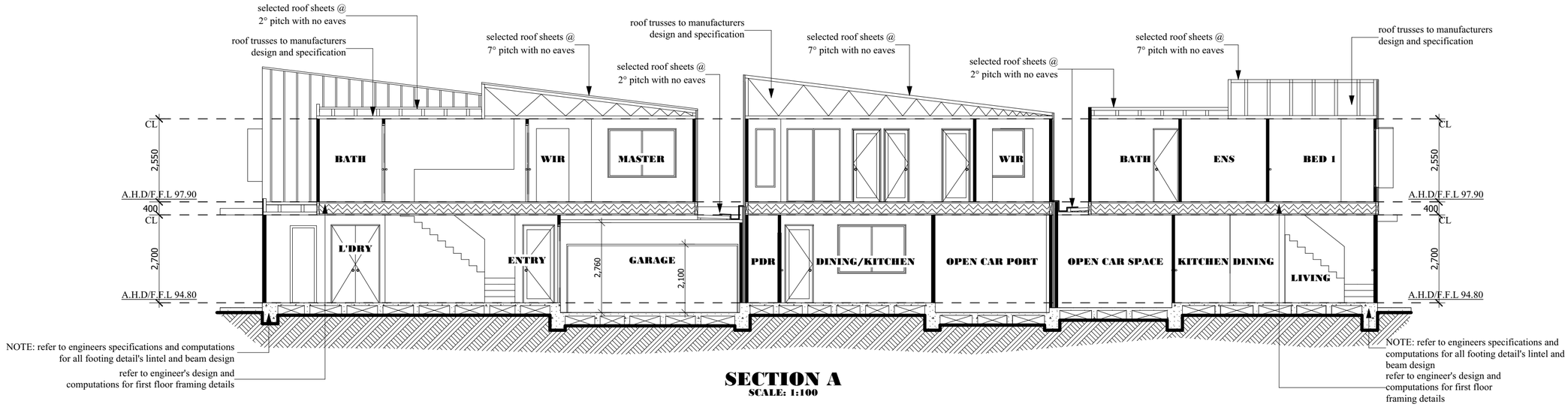
NOTE:
ROOF TRUSSES NOT TO BE ORDERED UNTIL AFTER A SITE MEASEURE OF EXTERNAL WALLS

NOTE:
REFER TO ENGINEERS SPECIFICATIONS AND COMPUTATIONS FOR DESIGN AND LOCATION OF STRUCTURAL SUPPORT BEAMS AND LINTELS

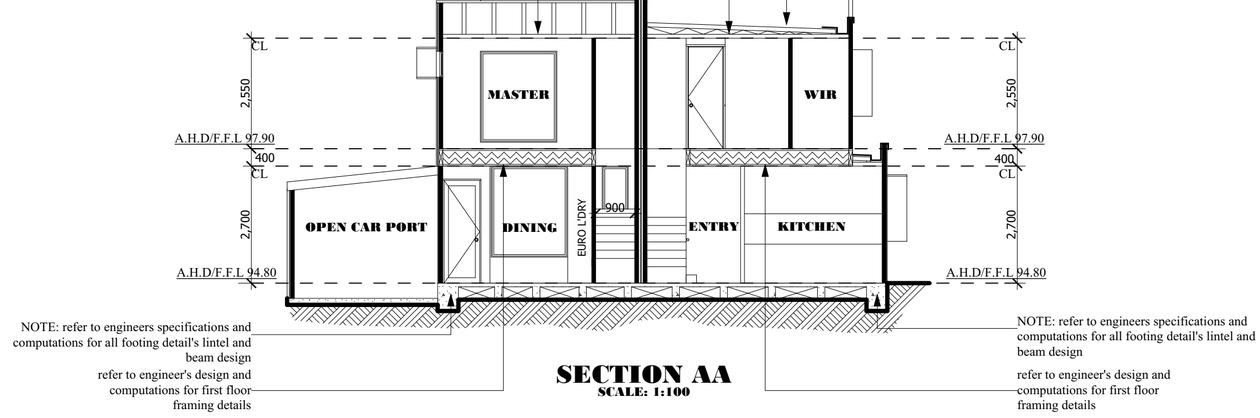
NOTE:
GROUND MUST BE GRADED AWAY FROM EXTERNAL WALLS, AND SURFACE WATER PROPERLY DRAINED BY MEANS OF SURFACE CUT / - OFF DRAINS CONNECTED INTO SWD VIA SILT PITS

NOTE:
PROVIDE WEEP HOLES EVERY 4TH PERPENDICULAR OR MAX. 1200MM MAX IMMEDIATLY ABOVE DPC

NOTE:
THE TRRESHHOLD OF A DOORWAY MUST NOT INCORPORATE STEP OR RAMP AT DOOR LEAF UNLESS THE DOOR SILL IS NOT MORE THAN 190MM ABOVR FINISHED SURFACE OF THE GROUND, BALCONY OR THE LIKE TO WHICH THE DOORWAY OPENS



SECTION A
SCALE: 1:100



SECTION AA
SCALE: 1:100

BRICK LINTEL SCHEDULE

SPAN (mm)	MIN. END BEARING (mm)	4 COURSE (w x h x th)	FULL WALL OR GABLE (mm)
UPTO 2000	115	100 x 76 x 5	100 x 76 x 5
OVER 2000 TO 3000	130	100 x 76 x 6.5	102 x 76 x 6.5
OVER 3000 TO 4000	150	152 x 102 x 10	152 x 102 x 10

LINTELS TO BE HOT DIPPED GALVANISED
LINTELS ARE FOR NON-LOAD BEARING WALLS

LINTEL AND JAMB STUD SCHEDULE FOR TILED ROOF AT 600 CTS - SINGLE STOREY LOADS

OPENING SIZE	LINTELS RLW 3600 F17 KDHW	JAMB STUDS 3000 HIGH	LINTELS RLW 5100 F17 KDHW	JAMB STUDS 3000 HIGH	LINTELS RLW 6600 F17 KDHW	JAMB STUDS 3000 HIGH
1500	90 x 45	2/90 x 45 F5	120 x 35	2/90 x 45 F5	140 x 35	2/90 x 35 F17
1800	120 x 45	2/90 x 35 F17	140 x 45	2/90 x 35 F17	170 x 45	2/90 x 35 F17
2100	170 x 35	2/90 x 35 F17	190 x 35	2/90 x 35 F17	190 x 45	2/90 x 35 F17
2400	190 x 35	2/90 x 35 F17	220 x 35	2/90 x 35 F17	220 x 45	2/90 x 35 F17
2700	220 x 35	2/90 x 35 F17	240 x 45	2/90 x 35 F17	270 x 45	2/90 x 35 F17
3600	290 x 45	2/90 x 45 F17	290 x 90	2/90 x 45 F17	290 x 90	2/90 x 45 F17

LINTEL NOTE:
LINTELS SUPPORTING CONCENTRATION OF LOAD OR GIRDER TRUSSES WILL BE REQUIRED TO BE DESIGNED BY AN ENGINEER AFTER TRUSS LAYOUT AND COMPUTATIONS ARE GIVEN

ARCDESIGN

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PROPRIETOR			DATE:	26.02.2025
A T ARCDESIGN PTY LTD E: info@atarchitecturedesign.com T:9499 1212			DRAWING NO:	09

BUILDING PERMIT
Building Act 1993 Building Regulations 2018
PERMIT NUMBER: 6035731277622 DATE ISSUED: 01/04/2025
ARKI BUILDING SURVEYORS PTY LTD

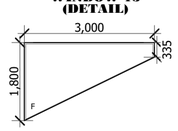
INSPECTION BOOKING
EMAIL
inspections@arkibs.com.au
TEL: 9687 0333
MIN. 24 HOURS NOTICE REQUIRED

WINDOW SCHEDULE

DWELLING 01

NO:	HEIGHT:	WIDTH:	HEAD HEIGHT:	TYPE:
GROUND FLOOR				
W01	2400	800	2400	ALUMINIUM FIXED
W02	2400	800	2400	ALUMINIUM AWNING
W03	2100	1500	2400	ALUMINIUM FIXED
W04	1200	600	2400	ALUMINIUM AWNING
W05	1200	600	2400	ALUMINIUM AWNING
FIRST FLOOR				
W06	1800	800	2250	ALUMINIUM FIXED
W07	1800	1765	2250	ALUMINIUM AWNING & FIXED
W08	1800	1765	2250	ALUMINIUM AWNING & FIXED
W09	600	1800	2250	ALUMINIUM SLIDING & FIXED
W10	1200	600	2250	ALUMINIUM AWNING
W11	1200	600	2400	ALUMINIUM AWNING
W12	1500	2100	2250	ALUMINIUM AWNING & FIXED
W13	1800	3000	2250	ALUMINIUM FIXED (reffer to section detail)

WINDOW 13 (DETAIL)



WINDOW SCHEDULE

DWELLING 02

NO:	HEIGHT:	WIDTH:	HEAD HEIGHT:	TYPE:
GROUND FLOOR				
W01	2100	600	2400	ALUMINIUM FIXED
W02	1500	2100	2400	ALUMINIUM AWNING
W03	1500	1200	2400	ALUMINIUM AWNING & FIXED
FIRST FLOOR				
W04	1800	600	2250	ALUMINIUM FIXED
W05	1800	1800	2250	ALUMINIUM AWNING & FIXED
W06	1500	2100	2250	ALUMINIUM AWNING & FIXED
W07	1200	900	2250	ALUMINIUM AWNING
W08	600	1800	2250	ALUMINIUM SLIDING

WINDOW SCHEDULE

DWELLING 03

NO:	HEIGHT:	WIDTH:	HEAD HEIGHT:	TYPE:
GROUND FLOOR				
W01	1800	900	2400	ALUMINIUM AWNING
W02	1800	1800	2400	ALUMINIUM AWNING & FIXED
W03	1800	1290	2400	ALUMINIUM AWNING & FIXED
W04	1200	600	2400	ALUMINIUM AWNING
FIRST FLOOR				
W05	1500	2100	2250	ALUMINIUM AWNING & FIXED
W06	1200	600	2250	ALUMINIUM AWNING
W07	1500	1800	2250	ALUMINIUM AWNING & FIXED
W08	1500	1800	2250	ALUMINIUM AWNING & FIXED
W09	1200	600	2250	ALUMINIUM AWNING

WINDOW SCHEDULE

DWELLING 04

NO:	HEIGHT:	WIDTH:	HEAD HEIGHT:	TYPE:
GROUND FLOOR				
W01	1800	600	2700	ALUMINIUM FIXED
W02	2100	1765	2400	ALUMINIUM AWNING & FIXED
W03	1200	1200	2400	ALUMINIUM AWNING & FIXED
FIRST FLOOR				
W04	2100	1765	2250	ALUMINIUM AWNING & FIXED
W05	600	2100	2250	ALUMINIUM SLIDING
W06	1200	600	2250	ALUMINIUM AWNING
W07	1500	1800	2250	ALUMINIUM AWNING & FIXED

DOOR SCHEDULE

DWELLING 01

NO:	HEIGHT:	WIDTH:	TYPE:
D01	2400	820	TIMBER ENTRY DOOR
D02	2400	3000	ALUMINIUM SLIDING DOOR
D03	2400	820	TIMBER CAR SPACE DOOR
D04	2400	820	TIMBER CAR SPACE DOOR

DOOR SCHEDULE

DWELLING 02

NO:	HEIGHT:	WIDTH:	TYPE:
D01	2400	820	TIMBER ENTRY DOOR
D02	2400	1800	ALUMINIUM SLIDING DOOR

DOOR SCHEDULE

DWELLING 03

NO:	HEIGHT:	WIDTH:	TYPE:
D01	2400	920	TIMBER ENTRY DOOR
D02	2100	5200	REMOTE CONTROLLED PANEL LIFT GARAGE DOOR
D03	2400	820	TIMBER GARAGE DOOR
D04	2400	3000	ALUMINIUM SLIDING DOOR

DOOR SCHEDULE

DWELLING 04

NO:	HEIGHT:	WIDTH:	TYPE:
D01	2400	820	TIMBER ENTRY DOOR
D02	2400	2100	ALUMINIUM SLIDING DOOR

ARCDESIGN

NOTES:
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PROJECT/ADRESS	REVISIONS	DATE:	SHEET SIZE:	A2
4 x Double Storey Unit Development. 167 Rathcown Road, Reservoir	Prelim SK-1	28/04/21	JOB NO:	123
CLIENT	TP ENDORSED	29/10/24	SCALE:	AS NOTED
OSMOND HYLTON	BP	20/12/24	DRAW:	
PROPRIETOR			DATE:	26.02.2025
A T ARCDESIGN PTY LTD E: info@atarchitecturedesign.com T:9499 1212			DRAWING NO:	10

ELECTRICAL LEGEND

	LOW VOLTAGE LED LIGHTS (5 WATT MIN)
	WALL MOUNTED LIGHT FITTING
	WALL MOUNTED (CENSOR)
	HEATING REGISTER
	BATTEN HOLDER (incl 1 to ceiling space)
	CEILING MOUNTED HEAT LAMP (2)
	CEILING MOUNTED HEAT LAMP (4)
	300mm, SURFACE MOUNTED FLUORESCENT LIGHT FITTING or similar
	1200mm, SURFACE MOUNTED FLUORESCENT LIGHT FITTING (TWIN)
	DOUBLE GPO 300mm ABOVE FFL unless stated otherwise
	DOUBLE GPO 300mm ABOVE BENCHD
	SINGLE GPO (external)1000mm Above Ground
	SINGLE GPO 300mm ABOVE BENCH include 1 to ceiling space
	single GPO 300mm ABOVE FFL unless stated otherwise
	TELEVISION COAXIAL POINT (not including antenna)
S.D.	SMOKE DETECTORS: INSTALLED AS PER PART 3. 7. 2 OF THE BCA AND TO COMPLY WITH AS 3786
	HEATING CONTROL
P	PHONE POINT or MODEM POINT
HW	HOT WATER SERVICE (135 Lt)
	ELECTRICAL METER BOX
	GARDEN LIGHTS
	Light Switch
EF	Exhaust fan

LIGHTING LOADS UNIT 1

ROOM NAME	ROOM AREA	MAXIMUM ALLOWED LOAD
GROUND FLOOR	140.93 **m2** X 5W/**m2**	201.1 WATTS
GARAGE	23.3 **m2** X 3W/**m2**	69.9 WATTS
ALFRESCO	13.43 **m2** X 4W/**m2**	53.72 WATTS
PORCH	**1.2m2** X 4W/**m2**	4.8WATTS

LIGHTING LOADS UNIT 2

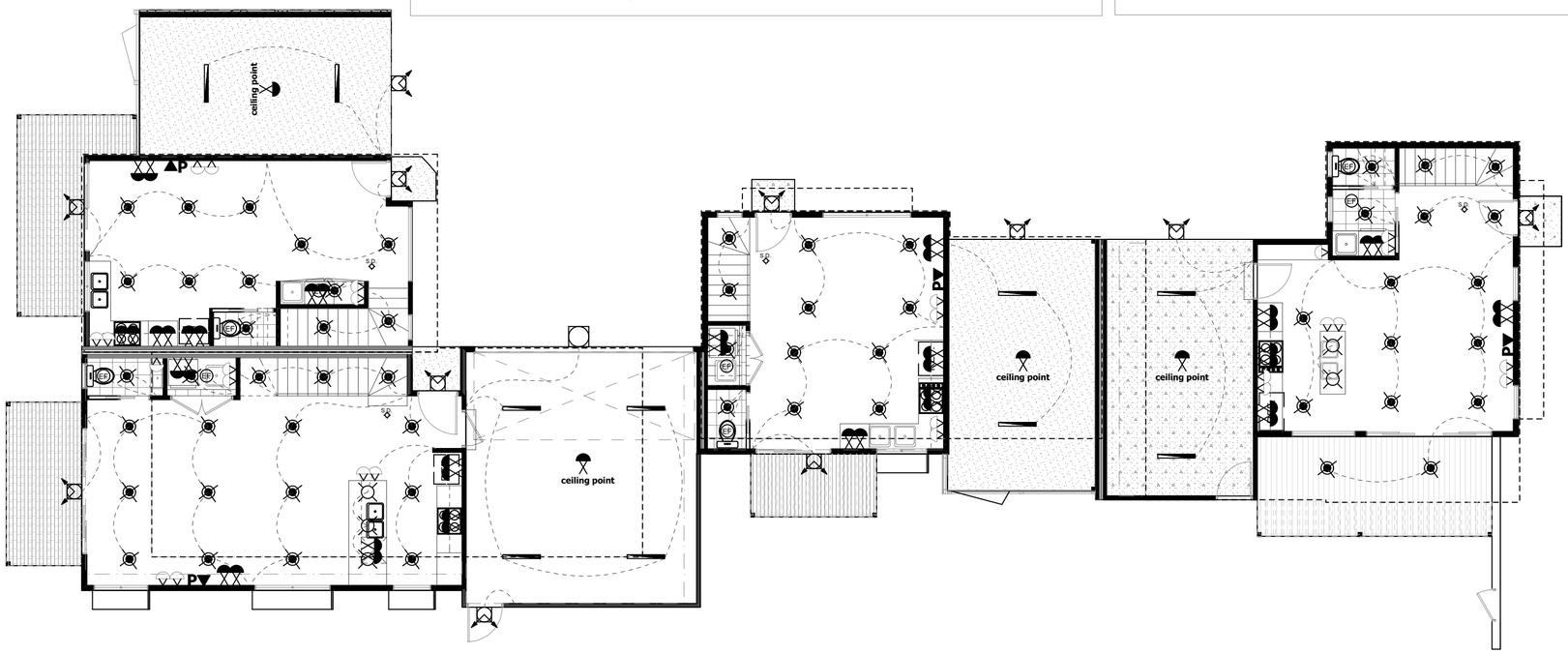
ROOM NAME	ROOM AREA	MAXIMUM ALLOWED LOAD
GROUND FLOOR	33.3 **m2** X 5W/**m2**	166.5 WATTS
GARAGE	19.87 **m2** X 3W/**m2**	59.61 WATTS
ALFRESCO	4.5 **m2** X 4W/**m2**	18 WATTS
PORCH	**0.83m2** X 4W/**m2**	3.32WATTS

LIGHTING LOADS UNIT 3

ROOM NAME	ROOM AREA	MAXIMUM ALLOWED LOAD
GROUND FLOOR	51.0 **m2** X 5W/**m2**	255 WATTS
GARAGE	34.6 **m2** X 3W/**m2**	103.8 WATTS
ALFRESCO	7.0 **m2** X 4W/**m2**	28 WATTS
PORCH	**1.07m2** X 4W/**m2**	4.28WATTS

LIGHTING LOADS UNIT 4

ROOM NAME	ROOM AREA	MAXIMUM ALLOWED LOAD
GROUND FLOOR	35.8 **m2** X 5W/**m2**	179 WATTS
GARAGE	20.7 **m2** X 3W/**m2**	62.1 WATTS
ALFRESCO	6.0 **m2** X 4W/**m2**	24 WATTS
PORCH	**1.0m2** X 4W/**m2**	4.0WATTS



ELECTRICAL GROUND FLOOR PLAN

SCALE 1:100

Lift off / removable Hinges:
If centre of threshold is less than 1.2m from front edge of sanitary fittings.

EF denote exhaust fan, mechanical ventilation from ens, powderroom and l'dry to be ducted to outside air.

S.D. denote smoke alarm hard wired to mains with back up battery as per B.C.A requirements in accordance with AS3786.2014, interconnected within the dwelling

NOTE:
ALL ELECTRICAL WORK TO COMPLY WITH AS 3786-2014
SMOKE DETECTORS TO BE HARD WIRED & COMPLY WITH AS 3876-2014

DIRECT WIRE TO APPLIANCES (wall oven) power outlets for appliances not shown

NOTE:
PROVIDE LIGHT POINT & SINGLE POWER POINT TO ROOF SPACE FOR DUCTED HEATING UNIT.

DUCTED HEATING REGISTERS & RETURN AIR LOCATIONS MAY VARY TO THE DISCRETION OF THE CONTRACTOR TO MAXIMISE UNIT EFFICIENCY & TO THE MANUFACTURERS SPECIFICATIONS

PROVIDE 1 x 15 ampere OUTLET FOR DISHWASHER SPACE IF REQUIRED

SMOKE DETECTORS TO BE NO LESS THAN 300mm FROM WALLS, DOORWAYS AND BULKHEADS

SMOKE ALARMS TO BE HARD- WIRED AND INTERCONNECTED AND NOT SELF CONTAINED

PROVIDE WEEP HOLES AT 1200mm MAX CETRES

ALL ELETRICAL WORKS TO BE CONFIRMED ON SITE AND BY THE CLIENT

Artificial lighting

(a) the lamp power density or illumination power density of artificial lighting, excluding heaters that emit light, must not exceed-

(i) in a Class 1 building, 5 W/m^2; and
(ii) on a verandah or balcony attached to a Class 1 building, 4 W/m^2; and
(iii) in a Class 10 building, 3 W/m^2

ARCDESIGN

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4 x Double Storey Unit Development. 167 Rathcown Road, Reservoir	Prelim SK-1	28/04/21	JOB NO:	123
CLIENT	TP ENDORSED	29/10/24	SCALE:	AS NOTED
OSMOND HYLTON	BP	20/12/24	DRAW:	
PROPRIETOR			DATE:	26.02.2025
A T ARCDESIGN PTY LTD E: info@atarchitecturedesign.com T:9499 1212			DRAWING NO:	11

ELECTRICAL LEGEND

	LOW VOLTAGE LED LIGHTS (5 WATT MIN)
	WALL MOUNTED LIGHT FITTING
	WALL MOUNTED (CENSOR)
	HEATING REGISTER
	BATTEN HOLDER (incl 1 to ceiling space)
	CEILING MOUNTED HEAT LAMP (2)
	CEILING MOUNTED HEAT LAMP (4)
	300mm, SURFACE MOUNTED FLUORESCENT LIGHT FITTING or similar
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	DOUBLE GPO 300mm ABOVE FFL unless stated otherwise
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	GARDEN LIGHTS
	Light Switch
EF	Exhaust fan

LIGHTING LOADS UNIT 1

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LIGHTING LOADS UNIT 4

ROOM NAME	ROOM AREA	MAXIMUM ALLOWED LOAD
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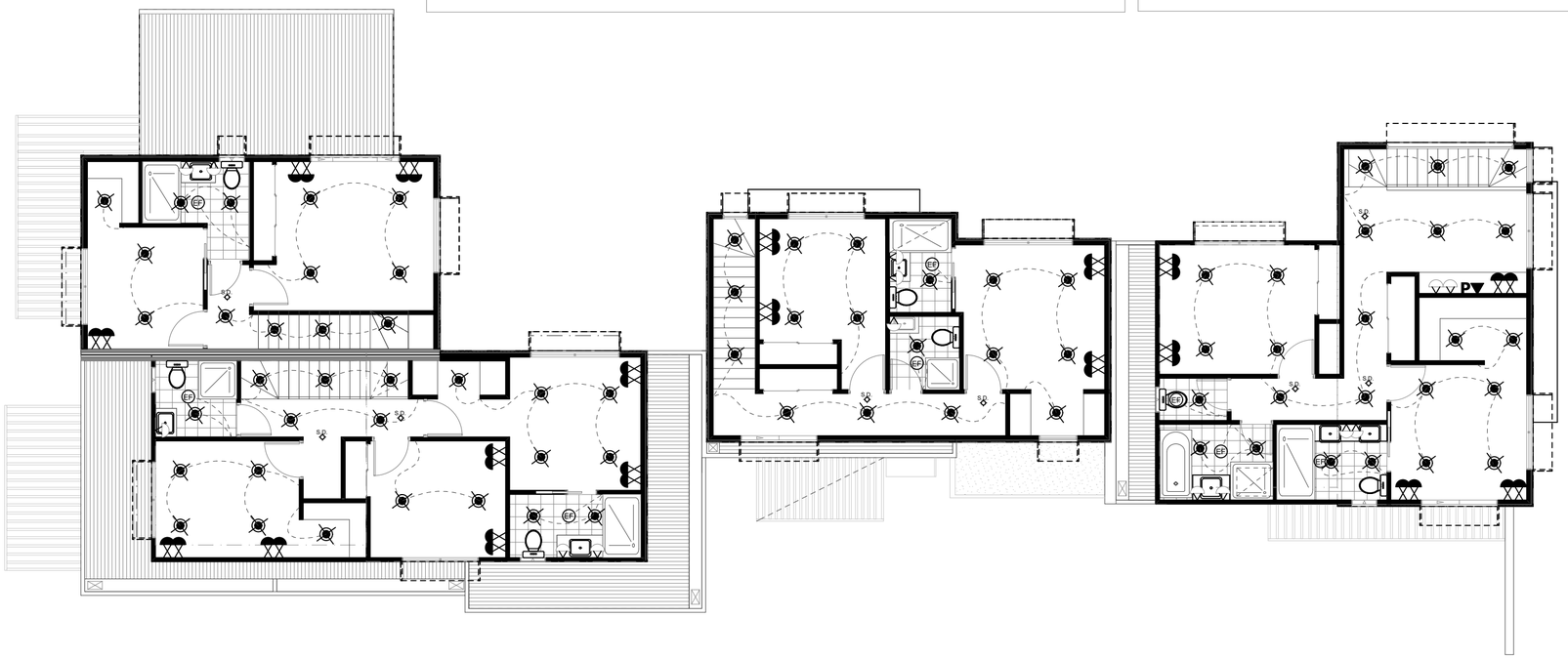

ELECTRICAL FIRST FLOOR PLAN

SCALE 1:100

Lift off / removable Hinges:
If centre of threshold is less than 1.2m from front edge of sanitary fittings.

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S.D. denote smoke alarm hard wired to mains with back up battery as per B.C.A requirements in accordance with AS3786.2014, interconnected within the dwelling

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SMOKE DETECTORS TO BE HARD WIRED & COMPLY WITH AS 3876-2014

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ARCDESIGN

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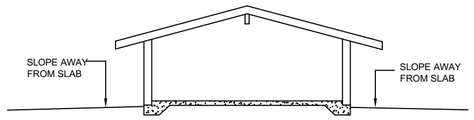
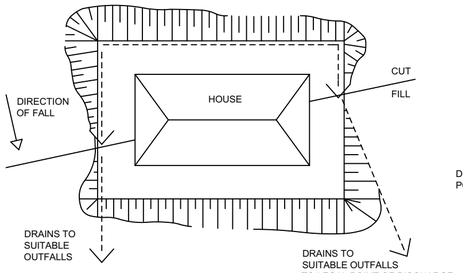
4 x Double Storey Unit Development. 167 Rathcown Road, Reservoir	Prelim SK-1	28/04/21	JOB NO:	123
CLIENT	TP ENDORSED	29/10/24	SCALE:	AS NOTED
OSMOND HYLTON	BP	20/12/24	DRAW:	
PROPRIETOR			DATE:	26.02.2025
A T ARCDESIGN PTY LTD E: info@atarchitecturedesign.com T:9499 1212			DRAWING NO:	12

Typical Plan

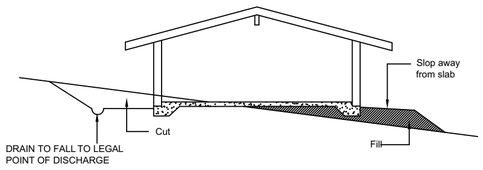
SITES WITH SLIGHT OR NO FALLS



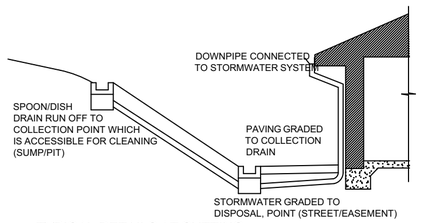
TYPICAL SECTION



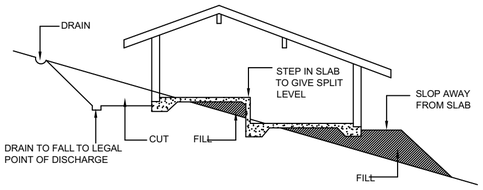
TYPICAL SECTION



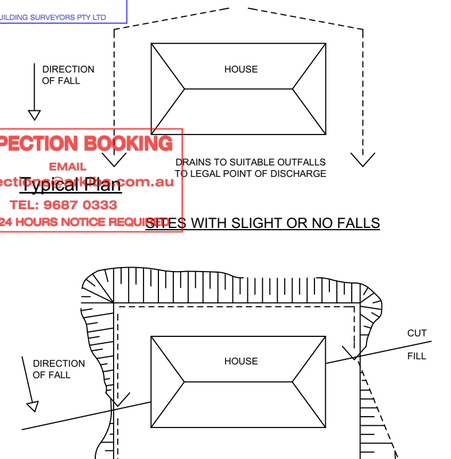
TYPICAL SECTION OF SITES WITH FALLS UP TO 1 IN 8



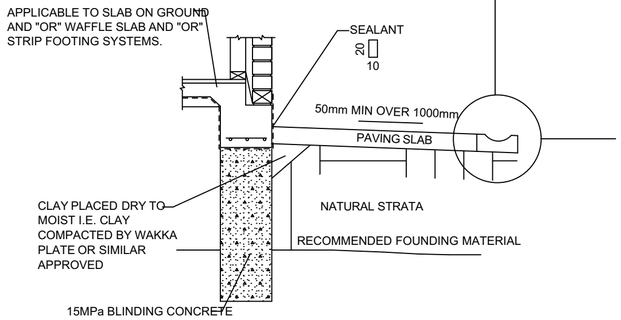
TYPICAL DETAILS AT CUTTING SITES WITH SIGNIFICANT FALLS



TYPICAL SECTION OF SITES WITH FALLS GREATER THAN 1 IN 8



TYPICAL SPOON DRAIN DETAILS



EXTERNAL DRAINAGE WITH PAVEMENT

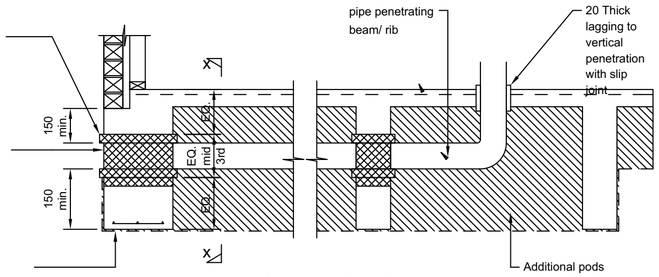
AN EDGE DRAIN IS REQUIRED WHERE SOIL SURFACE FALLS TOWARDS PAVING.
UNLESS STATED OTHERWISE PROVIDE ONE OF THE FOLLOWING:
CONCRETE SPOON DRAIN FORMED IN EDGE OF, OR SEPARATE FROM PAVING. GRATED PIT AT EVERY 10-15m CONNECTING TO STORMWATER SYSTEM.

THE FOOTING DESIGN IS BASED ON A SITE HAVING PROPER SITE DRAINAGE. IF THE DRAINAGE REQUIREMENTS CANNOT BE ACHIEVED CONTACT THIS OFFICE FOR FURTHER ADVICE AND A REDESIGN MAY BE REQUIRED.

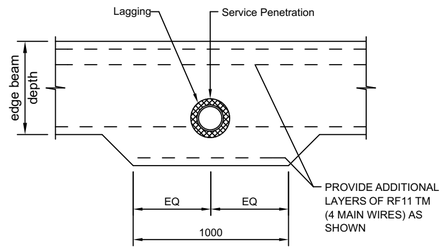
Closed-cell polystyrene lagging. 20 thick for Class H1 sites and below.
40 Thick for Class H,H2,E and P sites.
Sleeves allowing equivalent movements may be used as an alternative to lagging.

Hatching denotes zone of permitted service penetrations; middle third of beam depth, provided top and bottom edge distances are met.

Waffle raft or stiffened raft edge beam or strip footing

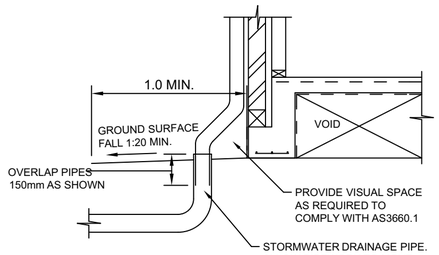


(a) Main Section of Pipe Penetration



(b) Section X-X of pipe penetration

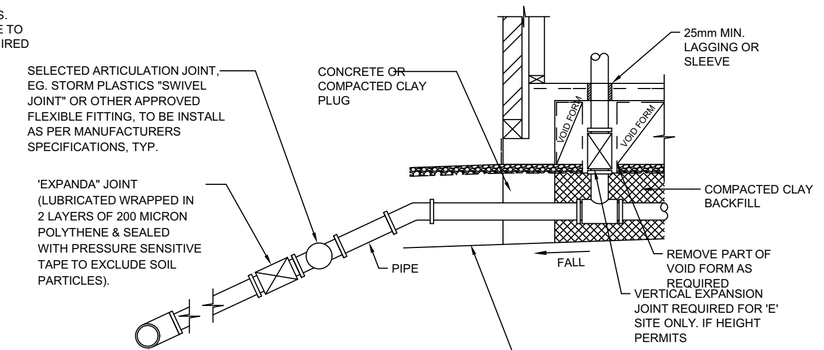
SWIVEL EXPANDA JOINTS ARE RECOMMENDED FOR CLASS S AND M SITES. OWNER/BUILDER ACCEPTS FULL RESPONSIBILITY FOR ANY DEFECTS DUE TO FAILURE TO INSTALL THE FITTINGS ON THESE SITES. FITTINGS ARE REQUIRED ON ALL SITES CLASSIFIED AS CLASS P DUE TO ABNORMAL MOISTURE CONDITIONS AND ON ALL CLASS H1, H2, E SITES.



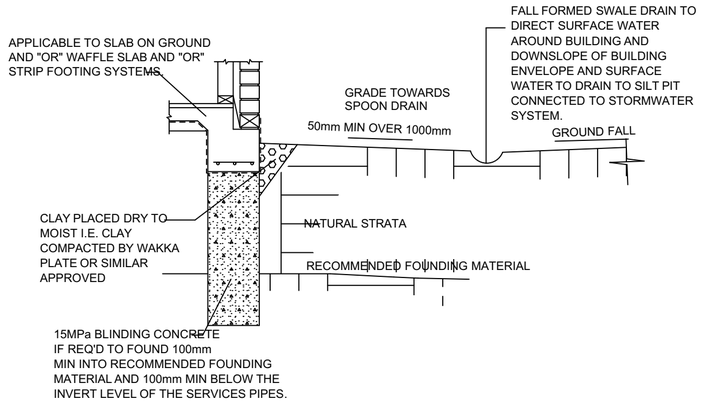
TYPICAL DOWNPIPE DETAIL

SELECTED ARTICULATION JOINT, EG. STORM PLASTICS "SWIVEL JOINT" OR OTHER APPROVED FLEXIBLE FITTING, TO BE INSTALL AS PER MANUFACTURERS SPECIFICATIONS, TYP.

"EXPANDA" JOINT (LUBRICATED WRAPPED IN 2 LAYERS OF 200 MICRON POLYTHENE & SEALED WITH PRESSURE SENSITIVE TAPE TO EXCLUDE SOIL PARTICLES).



PIPE TRENCH UNDER SLAB DETAIL



EXTERNAL DRAINAGE WITHOUT PAVEMENT DURING CONSTRUCTION

ARCDESIGN

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PROJECT/ADRESS	REVISIONS	DATE:	SHEET SIZE:	A2
4 x Double Storey Unit Development. 167 Rathcown Road, Reservoir	Prelim SK-1	28/04/21	JOB NO:	123
CLIENT	TP ENDORSED	29/10/24	SCALE:	AS NOTED
OSMOND HYLTON	BP	20/12/24	DRAW:	
PROPRIETOR			DATE:	26.02.2025
A T ARCDESIGN PTY LTD E: info@atarchitecturedesign.com T:9499 1212			DRAWING NO:	13

DRAINAGE REQUIREMENTS

GENERAL:

1. Defective surface drainage is a common factor in reactive clay foundation movement problems. The effective drainage of the site is a prerequisite for satisfactory performance of footing system. Problems can arise where the landscaping and other finishing earthworks are not part of the builder's contract, even though drainage requirements have been stipulated as part of the footing design. In such cases the builder is to make the owner aware of these requirements. Note these drainage requirements form part of the footing design.

DRAINAGE REQUIREMENTS:

1. Surface drainage shall be controlled from the start of site preparation and construction. The drainage system shall be completed by the finish of construction of the building.
2. The site should be graded or drained so that water cannot pond against or near the building. The ground immediately adjacent to the building should be graded to a uniform fall of 50 mm minimum away from the building over the first metre. Where this is achieved by filling, permeable materials shall not be placed on the underlying clay.
3. The subfloor space for buildings with suspended floors should be graded or drained to prevent ponding under the dwelling. (AS 2870 Cl. B2.3(a))
4. Subsurface drains (e.g. agricultural (aggi.) pipes) to remove groundwater shall not be used within 1.5m of the building unless noted otherwise.
5. Subsurface drains are to be100 Ø slotted PVC agricultural (aggi.) pipe wrapped in geofabric sock, laid to a minimum slope of 1:100 on a bed of stiff clay. The trench is to be filled with 10 mm crushed rock, min. 300 thick around the pipe (excluding bed material) and extended to the surface. The low end of each run of pipe is to be drained through a silt pit and connected to the stormwater system. The upper end of each run of pipe is to be brought to the surface and capped.

PLUMBING REQUIREMENTS:

1. The base of trenches shall be sloped away from the building. Trenches shall be backfilled with clay in the top 300 mm within 1.5 m of the building. The clay used for backfilling shall be compacted. Where pipes pass under the footing system, the trench shall be backfilled full depth with clay or concrete to restrict the ingress of water beneath the footing system.
   Penetrations of the edge beams or perimeter strip footings shall be avoided where practicable, but where necessary shall be as detailed. (AS 2870 Cl. 5.6.4(a))
2. Drains attached to or emerging from underneath the building shall incorporate flexible joints immediately outside the footing and commencing within 1 m of the building perimeter to accommodate differential soil movement in any direction equal to the ys value on the soil report. The fittings or devices provided to allow for movement shall be set at the mid-position of their range of possible movement at the time of installation, so as to allow for movement both upwards and downwards. This requirement applies to all stormwater and sanitary plumbing drains and discharge pipes. (AS 2870 Cl. 5.6.4(b))
3. On-site wastewater treatment units and associated land application areas shall be located to minimize soil moisture increase within the foundation. (AS 2870 Cl. 5.6.4(c))
4. Drainage under a slab shall be avoided where practicable. (AS 2870 Cl. 5.6.4(d))
5. Water service pipes installed under concrete slabs shall comply with the relevant requirements of AS 3500.1.
6. Heated water service pipes installed under concrete slabs shall comply with the requirements of AS 3500.4. (AS 2870 Cl. 5.6.4 note)
7. Cold water pipes and heated or hot water pipes shall not be installed under a slab, unless the pipes are installed within a conduit so that if the pipe leaks water it will be noticed above the slab or outside the slab and will not leak unnoticed under the slab. (AS 2870 Cl. 5.6.4(e))
8. For stormwater drains under buildings the thickness of overlay between the top of the pipe and the underside of a reinforced concrete slab shall not be less than 25 mm and there shall be adequate protection from mechanical damage. (AS 3500.3 Cl. 7.3.7)

LANDSCAPING:

1. The developer of the gardens shall not interfere with the drainage requirements, subfloor ventilation and weephole drainage systems. Garden beds adjacent to the building shall be avoided. Care shall be taken to avoid overwatering of gardens close to the building footings. (AS 2870 Cl. B2.3(b))
2. Planting of trees shall be avoided near the foundation of a building or neighbouring building as they can cause damage due to drying of the clay at substantial distances. To reduce, but no eliminate, the possibility of damage, trees should be restricted to a distance from the house as follows:
   i. 1 ½ x mature height for Class E sites.
   ii. 1 x mature height for Class H1 and Class H2 sites
   iii. ¾ x mature height for Class M sites.

   Where rows or groups of trees are involved, the distance from the building should be increased. Removal of trees from the site can also cause similar problems. (AS 2870 B2.3 (c))

MAINTENANCE:

1. Leaks in plumbing, including stormwater and sewerage drainage shall be repaired promptly. (AS 2870 B2.3(d))
   The owner is responsible for routine inspection of the drainage system. An inspection of silt traps on an annual basis is a min. requirement. Build up of silty materials within the silt trap is to be cleaned out. A heavy build up of silt may require flushing out the aggi. line where applicable.

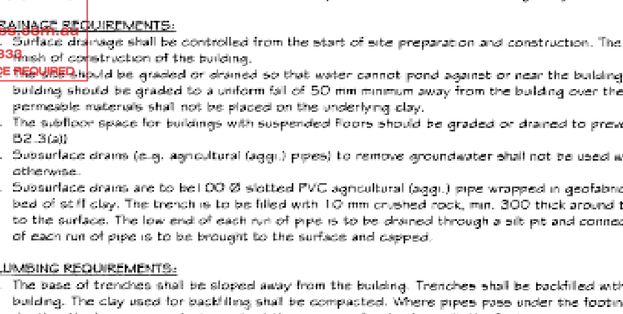
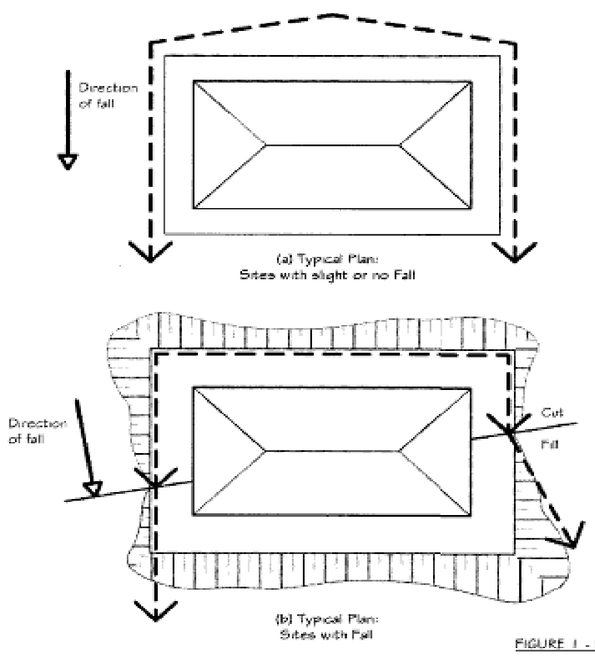


FIGURE 3 - EXCAVATION FOR DRAINS ADJACENT TO FOOTINGS



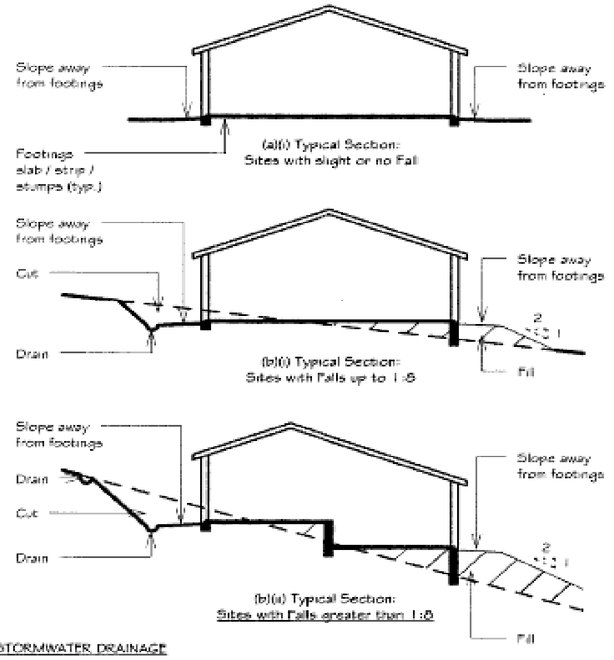
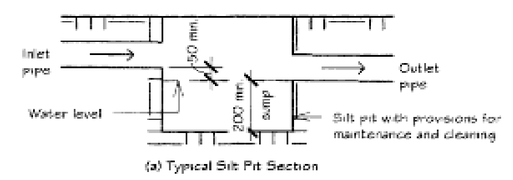


FIGURE 1 - STORMWATER DRAINAGE

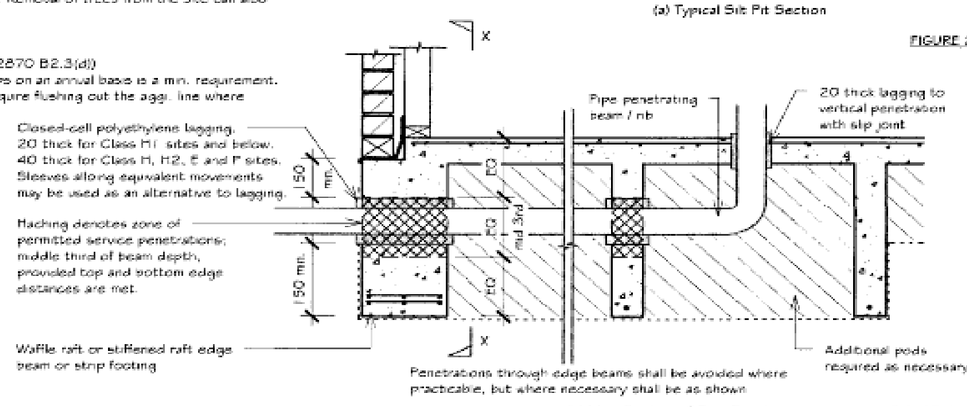


(a) Typical Silt Pit Section

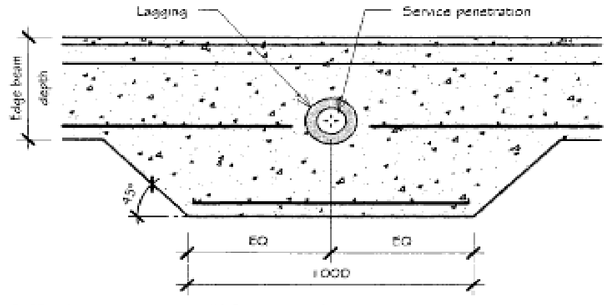
Nominal size of outlet pipe	Rectangular		Circular	Depth below invert of outlet
	Width	Length	Ø	
≤150	600	1000	1000	450
225	700	1000	1000	450
300	800	1000	1000	450
375	1000	1000	1200	550

(b) Min. Internal Dimensions for Silt Pits

FIGURE 2 - SILT PIT



(a) Main Section of Pipe Penetration



(b) Section X-X of pipe penetration

FIGURE 4 - PIPE PENETRATIONS

NOTES:	PROJECT/ADRESS	REVISIONS	DATE:	SHEET SIZE:	A2
Do not scale: Contractors must verify all dimensions on site before commencing any work or preparing shop drawings which must be approved by the superintendant before manufacture. Any extra entailed in work shown on this drawing must be claimed and approved before proceeding	4 x Double Storey Unit Development. 167 Rathcown Road, Reservoir	Prelim SK-1	28/04/21	JOB NO:	123
	CLIENT	TP ENDORSED	29/10/24	SCALE:	AS NOTED
	OSMOND HYLTON	BP	20/12/24	DRAW:	
	PROPRIETOR			DATE:	26.02.2025
	A T ARCDESIGN PTY LTD	E: info@atarchitecturedesign.com T:9499 1212		DRAWING NO:	14

6 ENCLOSED SHOWERS

GENERAL

The height of the sides of the shower tray above the highest point of the finished tiled floor surface must be 150mm high or 25mm above the maximum possible water level in the shower compartment, whichever is higher, see Figure 11. Shower trays can be external, preformed or internal.

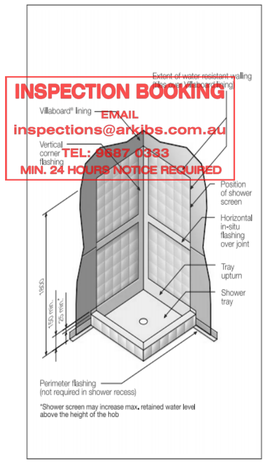


FIGURE 11 INTERNAL MEMBRANE

NOTE
The diagram above shows an internal membrane scenario. Alternatively, external membranes can also be used.

EXTERNAL MEMBRANES

These are constructed by installing a prefabricated tray manufactured from plastic, other flexible waterproofing membrane material, stainless steel or copper prior to fixing wall lining, ie the tray is on the outside of the wall lining, see Figure 12.

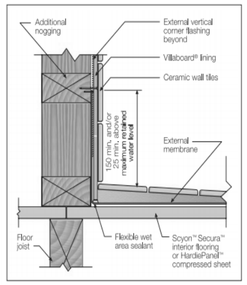


FIGURE 12 EXTERNAL MEMBRANE - VILLABOARD LINING

An alternative method of constructing an external tray is to use prefabricated fibreglass reinforced plastic angles, which are placed around the perimeter of the shower compartment prior to fixing the wall lining. In-situ fibreglass reinforced plastic is then applied to the remainder of the floor. Care must be taken not to glue the vertical leg of the angle to the wall framing. Membranes should be either supplied with floor wastes factory fitted or be capable of being dressed down into the waste pipe.

PREFORMED TRAYS AND BASES

With Villaboard lining that will be tiled, sealing is required around preformed trays and bases, see Figure 13 respectively. These trays and bases are usually manufactured from plastic, fibreglass or stainless steel, in a variety of sizes and configurations. Preformed trays and bases must be installed to manufacturer's instructions.

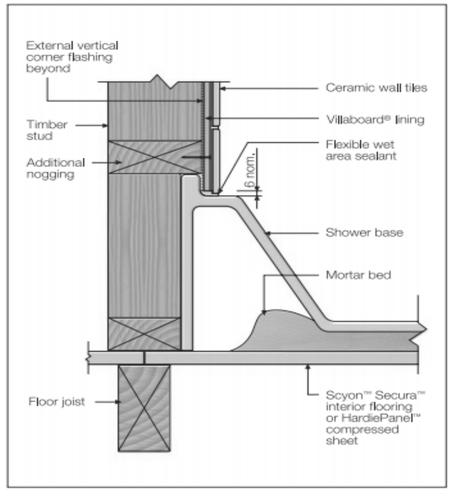


FIGURE 13 PREFORMED TRAY DETAIL FOR VILLABOARD LINING TO BE TILED

INTERNAL MEMBRANES

Internal in-situ systems are applied to the face of the Villaboard® lining, ie the membrane is on the inside face of the wall lining. Materials commonly used include liquid compounds of rubber, acrylic or epoxy usually reinforced with fibreglass, or sheet products of rubber, plastic or other waterproofing material.
As well as having waterproofing properties, the membrane must be compatible with tile adhesives. Because internal membranes are fixed to the Villaboard® lining, you must allow for frame movement and a bond breaker must be incorporated in the perimeter wall/floor junction before the membrane is installed, see Figures 14 and 15.

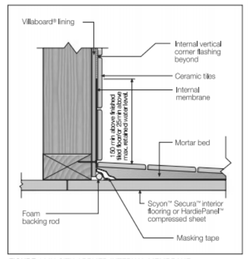


FIGURE 14 IN-SITU APPLIED INTERNAL MEMBRANE

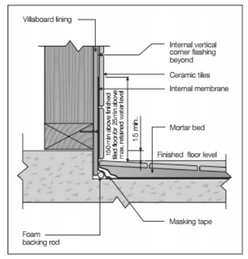


FIGURE 15 IN-SITU APPLIED INTERNAL MEMBRANE AT STEP-DOWN

SHOWER OVER BATHS

Where an enclosed shower is positioned over a bath, it needs to be protected by a shower screen. Waterproofing of the floor or walls beyond the bath is not required, see Figure 16.

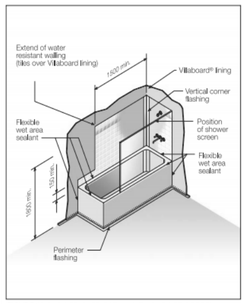


FIGURE 16 SHOWER OVER BATH - WITH SHOWER SCREEN

7 UNENCLOSED SHOWERS

Unenclosed showers are those where the shower fitting(s) are not contained within an enclosure.

Where the shower is unenclosed, you must have waterproof flooring for a distance extending 1500mm from the shower rose, projecting onto the floor, see Figure 20.

Water resistant walling (Villaboard® lining finished with tiles) must also extend 1500mm from the shower rose.

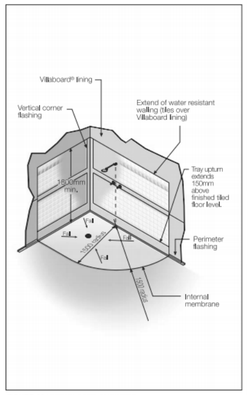


FIGURE 20 UNENCLOSED SHOWERS

Where a shower over a bath is not contained by a shower screen, you must waterproof the floor beyond the bath a distance extending 1500mm from the shower rose projected onto the floor, see Figure 21.

Although the perimeter flashing shown against wall and bath beyond 1500mm of the shower rose is not required, it is shown here because it is often installed for practical reasons.

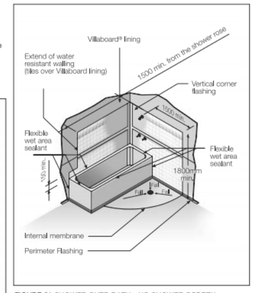


FIGURE 21 SHOWER OVER BATH - NO SHOWER SCREEN

The shower tray (either internal or external membrane) or the waterproofing beyond the bath must be terminated on an angle with its vertical leg finished flush with the tiled surface. The angle would normally be located in the floor tile jointing, see Figure 22.

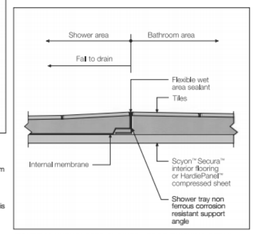
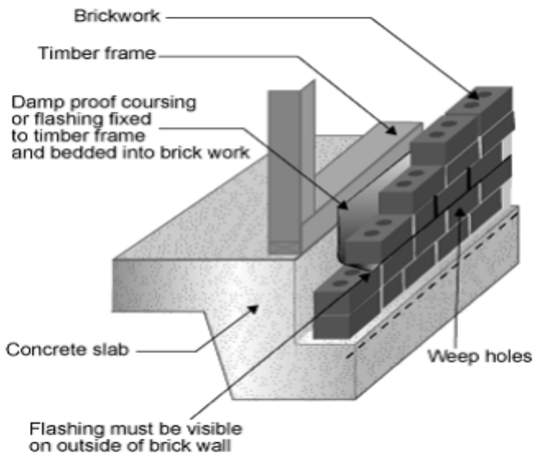
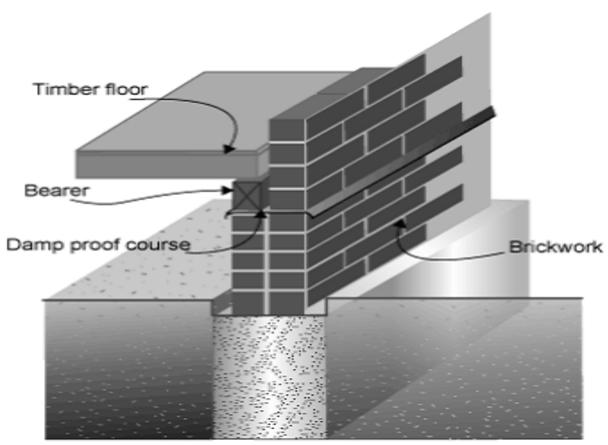
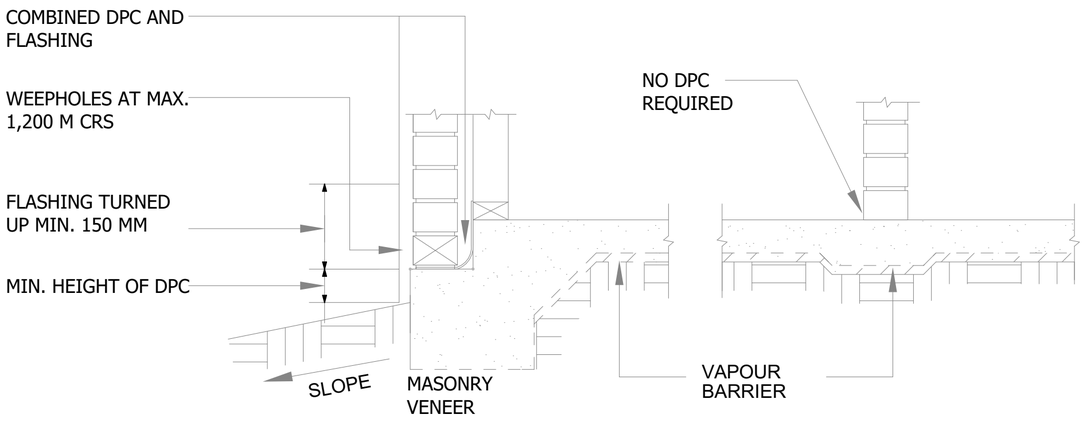


FIGURE 22 UNENCLOSED SHOWER - EDGE FINISHING DETAIL

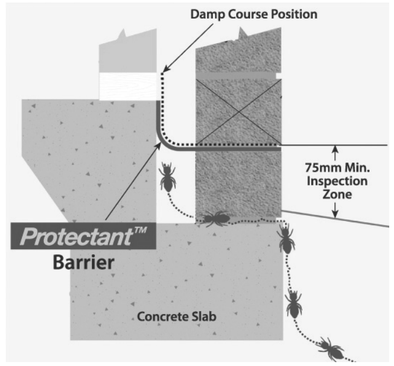
WATER PROOFING DETAILS, TYP.







DPCS AND FLASHINGS IN SUB-FLOOR STRUCTURES



TERMITE, TYP.

NOTE:
TREATMENT FOR TERMITE INFESTATION TO BE IN STRICT ACCORDNACE WITH THE AUSTRALIAN STANDARD A.S 3660.1

NOTE:
PART A - PRE CONSTRUCTION TERMITE TREATMENT

OPTION 1 - PRE CONSTRUCTION
PVC COLLARS FITTED TO ALL SERVICE PENETRATIONS- PRE CONCRETE SLAB
OPTION 2 - PRE CONSTRUCTION
SUB-FLOOR HAND SPRAY TREATMENT APPLYING BIFENTHRIN 100EC TERMICIDE

PART B - POST CONSTRUCTION TERMITE TREATMENT
POST CONSTRUCTION:
CHEMICAL HAND SPRAY TO CONCRETE SLAB PERIMETER

Where protection from moisture penetration is required in single-leaf masonry, moisture shall be prevented from entering the masonry around the windows by waterproofing the window reveals and sills and post-fitting the windows.

14.8.2 Damp-proof courses

Damp-proof courses (DPCs) shall be provided to protect all masonry against rising ground water. The DPC shall be placed as low as possible in the wall and in no case higher than the finished floor level.

The position of the DPC shall be not less than—

(a) 150 mm above the adjacent finished ground level;

(b) 100 mm above sandy well-drained areas that extend to the full depth of the footing system;

(c) 75 mm above the finished paved or concreted area; or

(d) 50 mm above finished paved or concreted area and protected from the direct effect of the weather by a carport, veranda or similar structures.

NOTE: Cavity flashing can also act as a DPC to prevent the upward or downward passage of moisture within masonry.

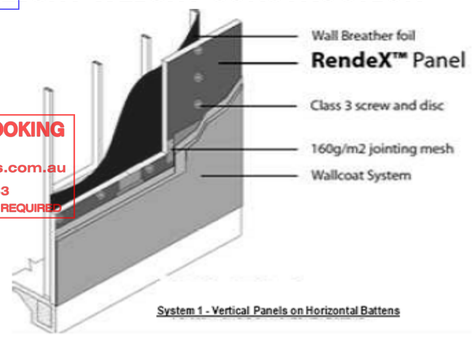
14.9 PARAPETS, CHIMNEYS AND CANTILEVERS

In wind categories N1, N2 and N3, the ratio of height to overall thickness for parapets, chimneys and freestanding walls built of unreinforced masonry shall not exceed 3:1 and the height shall not exceed 600 mm.

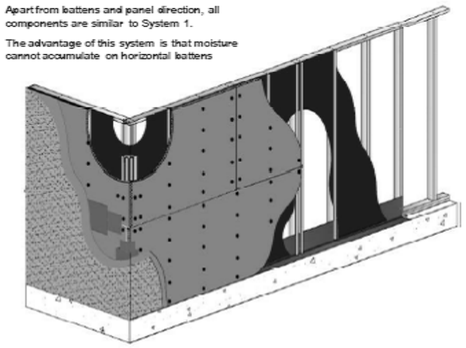
NOTE: In higher wind categories, or where the height exceeds these limits, the design of parapets, chimneys and cantilevers is outside the scope of this Standard.

NOTES:	PROJECT/ADRESS	REVISIONS	DATE:	SHEET SIZE:	A2
Do not scale: Contractors must verify all dimensions on site before commencing any work or preparing shop drawings which must be approved by the superintendant before manufacture. Any extra entailed in work shown on this drawing must be claimed and approved before proceeding	4 x Double Storey Unit Development. 167 Rathcown Road, Reservoir	Prelim SK-1	28/04/21	JOB NO:	123
	CLIENT	TP ENDORSED	29/10/24	SCALE:	AS NOTED
	OSMOND HYLTON	BP	20/12/24	DRAW:	
	PROPRIETOR			DATE:	26.02.2025
	A T ARCDESIGN PTY LTD	E: info@atarchitecturedesign.com T:9499 1212		DRAWING NO:	15

LIGHT WEIGHT CONSTRUCTION



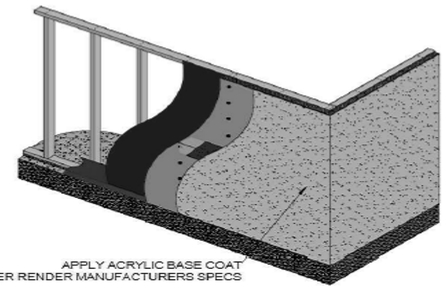
System 1 - Vertical Panels on Horizontal Battens



System 2 - Horizontal Panels on Vertical Battens

Apart from battens and panel direction, all components are similar to System 1.

The advantage of this system is that moisture cannot accumulate on horizontal battens

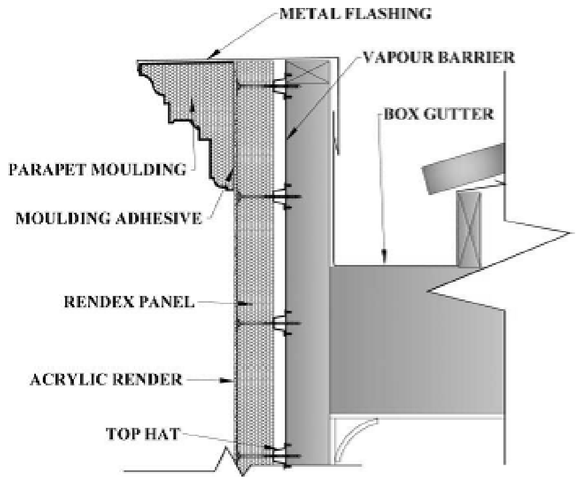


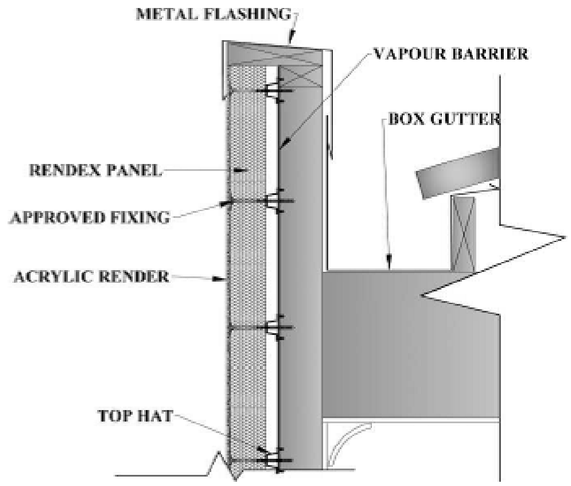
System 3: Horizontal Panels Direct Fixed to Timber or Steel Studs

All components similar to System 2, vertical battens are not installed

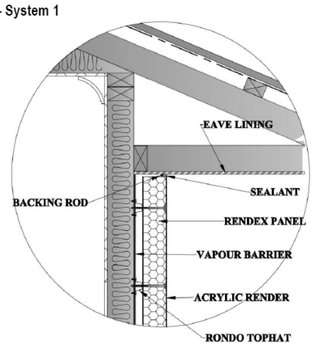
Where there is high risk of condensation within the wall cavity, System 2 is preferable to System 1 and 3.

Parapet Flashings – Systems 1

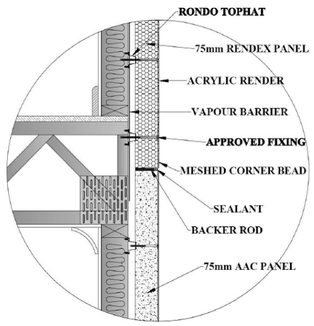




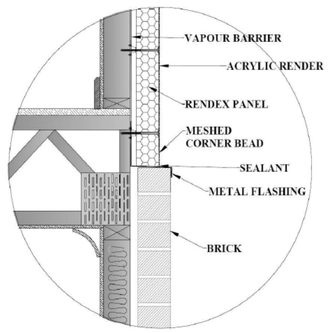
Eaves Detail – System 1



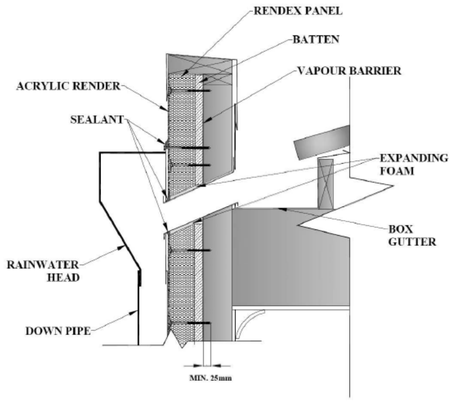
Horizontal Control Joint Detail – System 1
(incorporating Dissimilar Cladding Detail)



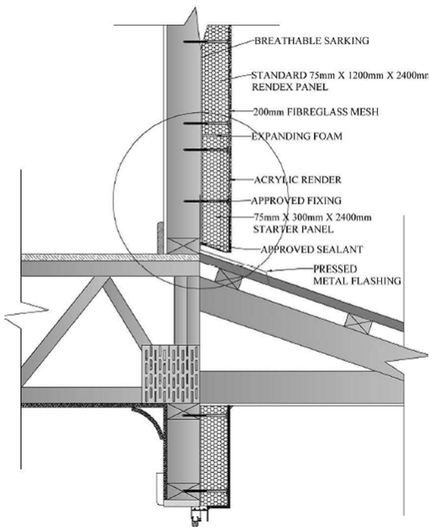
Rendex and Brick Veneer Detail – System 1



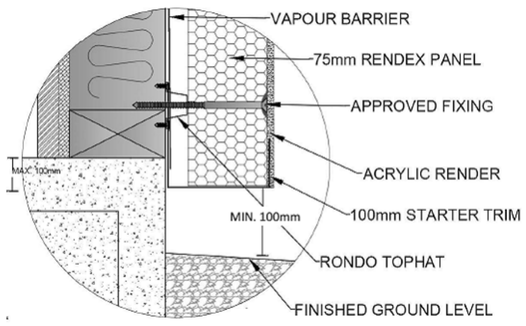
Penetration Detail – System 2



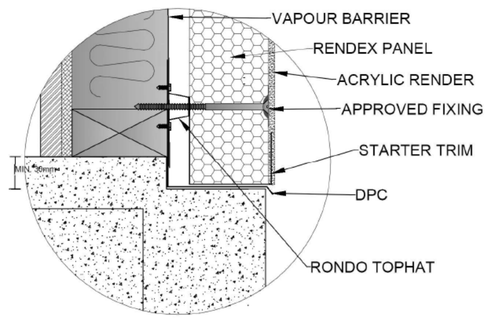
Rendex Starter Panel Roof Arrangement – System 3



Ground Slab Detail – System 1



Concrete Rebate Detail – System 1



Horizontal Control Joint Detail – System 1
(incorporating Dissimilar Cladding Detail)

LIGHT WEIGHT CONSTRUCTION DETAILS

NOTES:	PROJECT/ADRESS	REVISIONS	DATE:	SHEET SIZE:	A2
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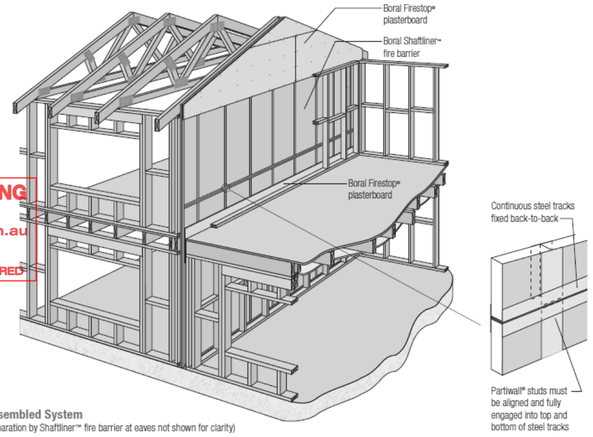
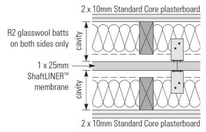


Assembled System
(Separation by Shaftliner™ fire barrier at eaves not shown for clarity)



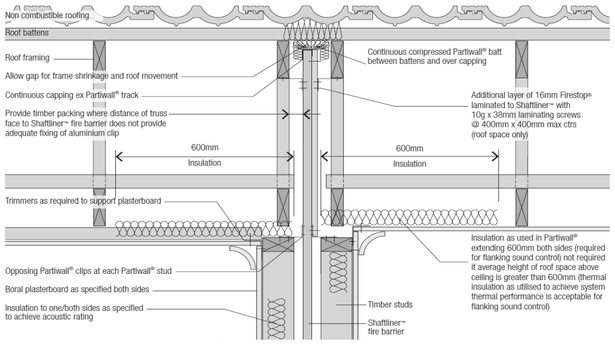
1 Hour
FRL 60/60/60

CSIRO Test
FSV - 0381

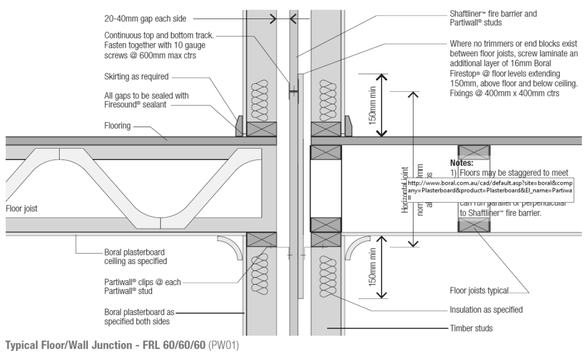
Opinions
FCO-016
FCO-256

$R_w + C_{tr}$ = 50dB
Acoustic Opinion
GH&A Sheet
No 89 – Rev B

$R_w + C_{tr}$ = 51dB
CSIRO Test
TL429r
(with R1.5 batts both sides)

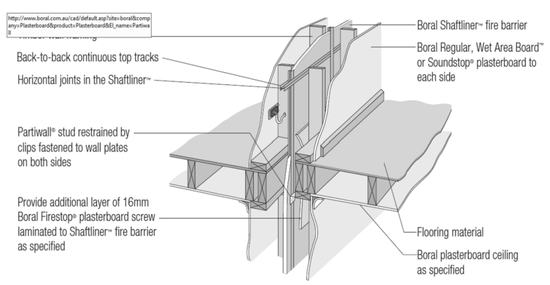


Pitched Roof - Wall/Roof Junction Detail - FRL 60/60/60 (PW13)



Typical Floor/Wall Junction - FRL 60/60/60 (PW01)

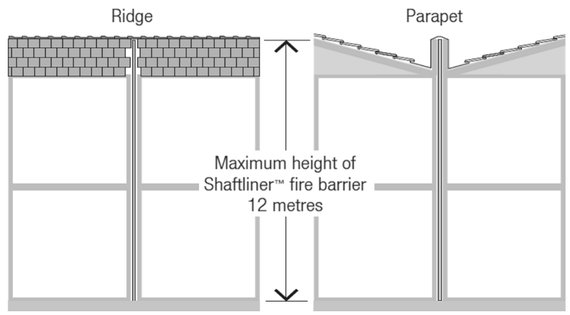
Perspective - Section at Roof



Typical Floor/Wall Junction

Maximum Permissible Height

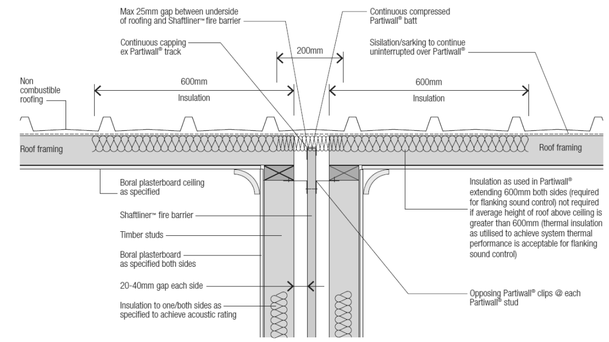
Height of the Shaftliner™ fire barrier should not exceed 12 metres.



Partiwall® Systems

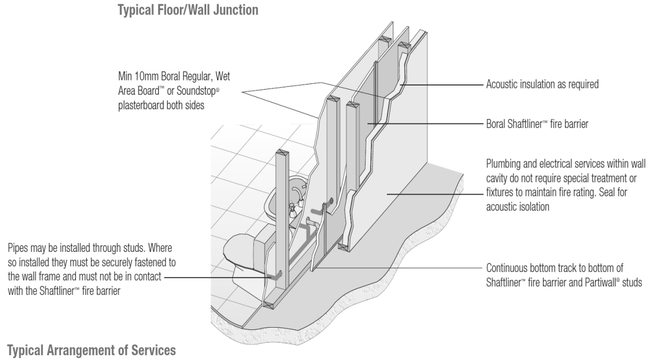
FRL 60/60/60 (System Type 25TP)

Assembly	System Reference	Nom Width (mm)	Stud Size (mm)	Pbd Weight (kg/m²)	Fire FRL Basis	Acoustic Ratings R_w	R_w+C_{tr}	Insulation	Total *R* Value (m²K/W)
 (Insulation not shown for clarity)	**25TP1010A**								
	1x25mm Shaftliner™ panel 1x10mm Soundstop® plasterboard to each side of timber frame	225	70	36.9	60/60/60 FCO-2256	60	47	R2.0 glass wool or 100P14 both sides	-
		225	70			62	50	90G32 both sides	5.88
		265	70 or 90			59	48	110mm thick Boral Partiwall® Acoustic batt one side only	-
		265	70 or 90			63 CSIRO TL469a	53	110mm thick Boral Partiwall® Acoustic batt both sides	5.27
		285	90			62	50	R2.0 glass wool or 100P14 both sides	4.84 or 4.98
		295	90			65	55	110mm thick Boral Partiwall® Acoustic batt both sides	5.76



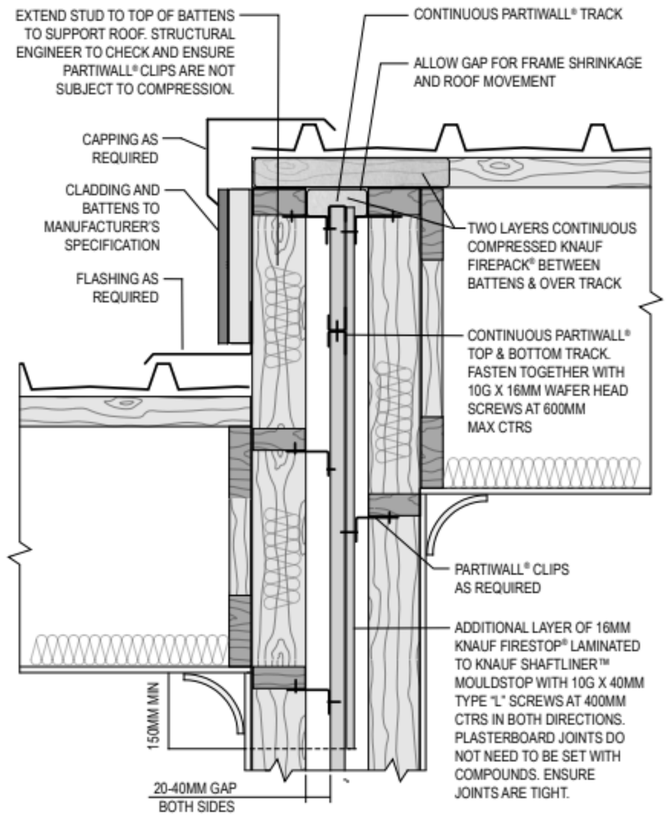
Flat Roof - Wall/Roof Junction Detail - FRL 60/60/60 (PW14)

Typical Floor/Wall Junction



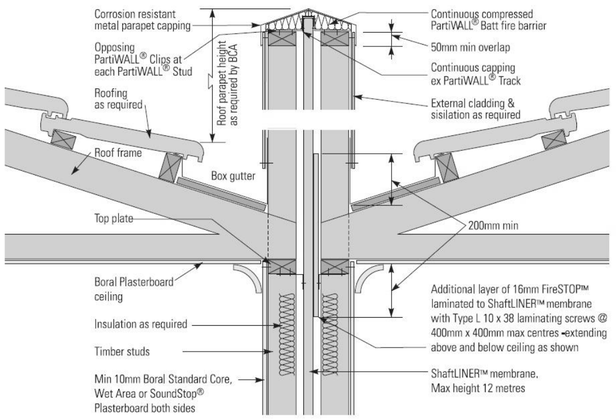
Typical Arrangement of Services

Figure 19: Staggered Metal Roof



Partiwall® Systems FRL 60/60/60

(System Type 265mm WITH LARGER CAVITY OVERALL 290mm)



Vertical Section at Roof Parapet

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	CLIENT	TP ENDORSED	29/10/24	SCALE:	AS NOTED
	OSMOND HYLTON	BP	20/12/24	DRAW:	
	PROPRIETOR			DATE:	26.02.2025
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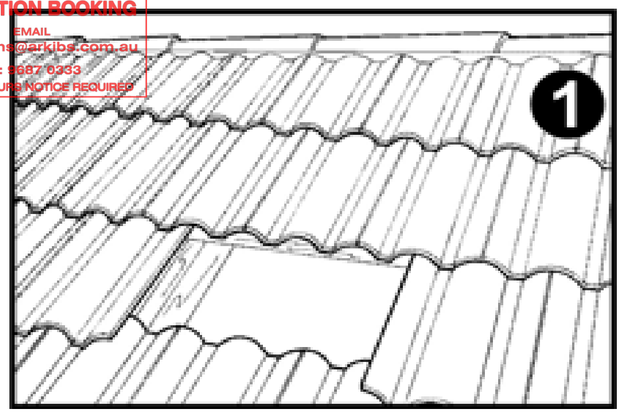
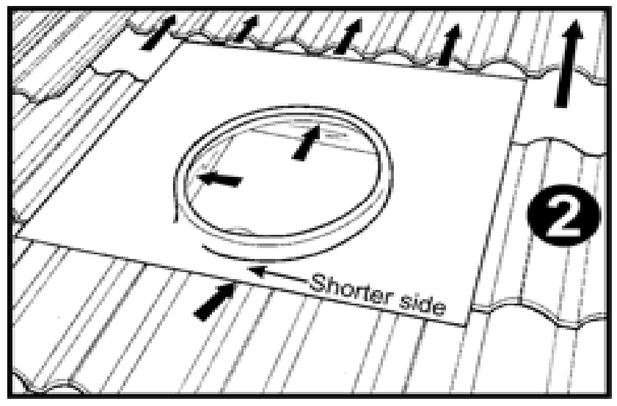
Installing a Roof Ventilator ('Whirly Bird')

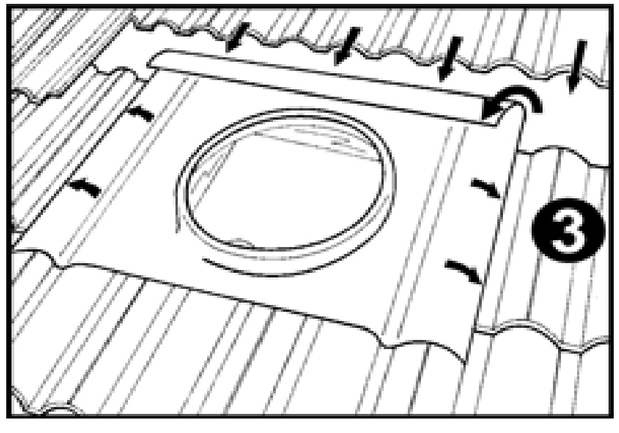
Installing the Twista is best done by a trained professional, ensuring that a weatherproof seal is restored to the roof, and that the Twista is operating at it's best. If you're a qualified tradesperson, you may like to follow these for whirly bird vent installation also. They are also available for download <http://www.twista.com.au/f/Installation-Instructions.pdf>. You can get the whirly bird sale price <http://www.twista.com.au/Whirly-Bird-Sale.htm> here.
WARNING: you must be wearing long, elbow-high safety gloves while performing any installation to prevent injury from all sharp edges, and in case of the two collar halves detaching.
Select the desired location for your ventilator. Away from the street side of the roof is usually preferred by most. Count down to the third row of tiles from the ridge and carefully remove 2 or 3 tiles (depending on size) to provide an opening equal or wider than the outlet hole in the flashing panel.



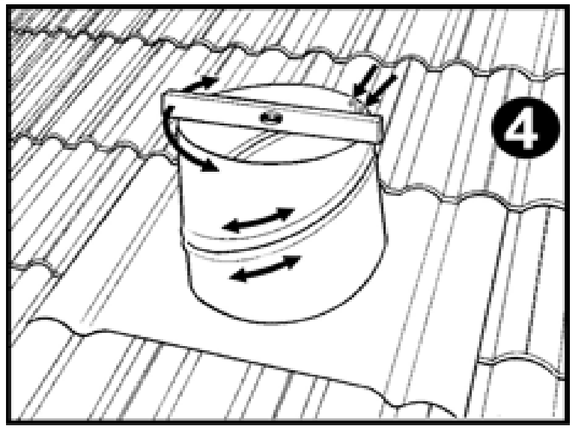
Slide the second row of tiles below the ridge upwards to clear the entire width of the flashing panel. Position the flashing panel over the roof opening ensuring that the outlet hole sits more or less between the rafters. Position the top edge of the outlet hole in line with the edge of the top tile batten. Make sure the shortest side of the flashing panel is facing down the roof slope.



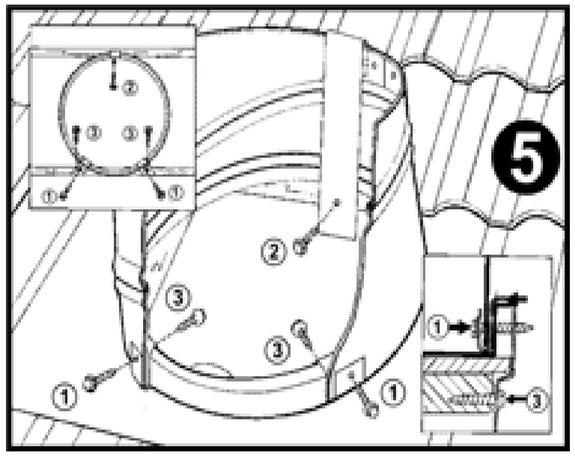
Bend down and form the two sides of the flashing panel to follow the side tile contours. Roll 40mm of the top edge up and over ensuring a return lip of 15-20mm is gained. Reposition the flashing panel over the roof opening. While holding it in place, slide the row of tiles you slid away back down as far as possible to hold the flashing in place. Please note that some specialty tiles (Terracotta and Swiss pattern for example) may require cutting to fit neatly



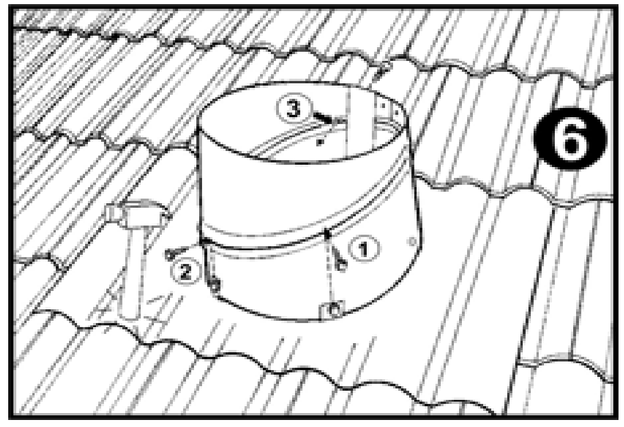
Place the variable pitch collar onto the flashing panel. Ensure that the end with the two holes is at the top (see illustration). Slide the two halves of the collar against one another to vary the pitch angle. Adjust so that the top of the collar is sitting horizontally when viewed from all angles. Secure the flashing panel and collar onto the roof by using the tree metal strap and self-tapping screws supplied. Carefully bend and position the metal straps at 12, 5, and 7 o'clock positions as shown. Screw the collar to the flashing panel through the front two straps (position 1). While pulling each strap down firmly, screw each strap to the roof timbers in the order shown (positions 2 & 3).



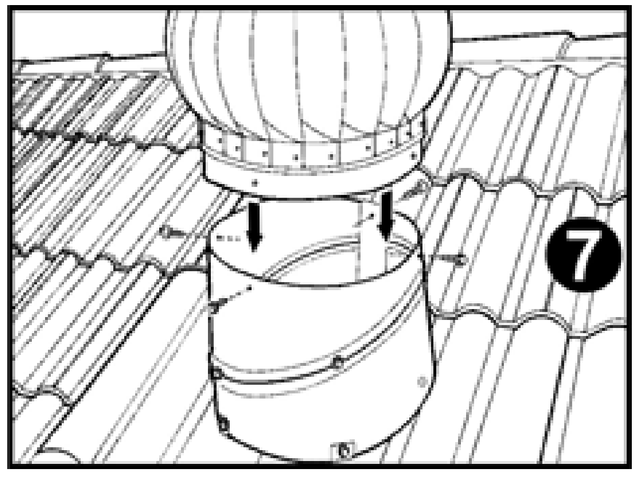
Place the variable pitch collar onto the flashing panel. Ensure that the end with the two holes is at the top (see illustration). Slide the two halves of the collar against one another to vary the pitch angle. Adjust so that the top of the collar is sitting horizontally when viewed from all angles.



Secure the flashing panel and collar onto the roof by using the tree metal strap and self-tapping screws supplied. Carefully bend and position the metal straps at 12, 5, and 7 o'clock positions as shown. Screw the collar to the flashing panel through the front two straps (position 1). While pulling each strap down firmly, screw each strap to the roof timbers in the order shown (positions 2 & 3).



Using a hammer handle, gently form the bottom and side edges of the flashing panel to the tile contours. Ensure that there are no large gaps between the flashing panel and the tiles. Re-check the level of the collar and adjust if necessary. Screw three screws into the collar variable pitch slide seam (joint) directly above the two metal straps at the front (1 and 2) and slightly to the side of the rear strap (3). Ensure the screw pass through both layers of metal in the seam and that they don't interfere with the lower fan blade. Note: for high wind areas silicone can be used on the inside seam to bond both layers of the metal collar. Ensure that oil film is removed).



Place the rotor head onto the collar, aligning one of the four fixing points with the centre of the rear strap where it is folded over the top of the collar. Fix the rotor head in place using four self-tapping screws supplied. Drive each screw in once and then unscrew all the way out and then re-screw it again to ensure a good, stress-free attachment. Note: *DO NOT* over-tighten these 4 screws, otherwise the base ring will crack in time. The screw heads must GENTLY touch the outside body of the ring. It must not place any pressure onto the base ring.
Please note: We recommend that all installers are experienced in the installation of whirly bird style roof ventilators and that they have a roof plumber's or builder's license, or that they are professional tradespersons. The supplier and manufacturer does not take any responsibility for installation work or consequential damage to ventilators of installations carried out by persons or organisations other than their own direct employees.

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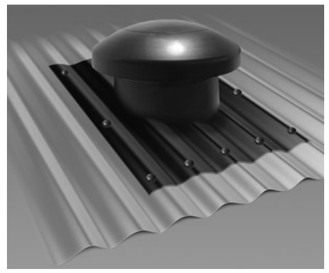
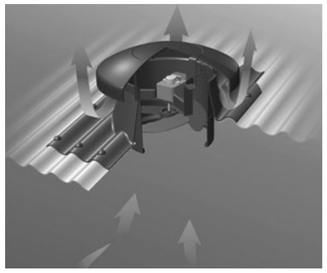
Enviromax – Powered Roof Ventilator

240 V Motored Roof ventilation that extracts 7 x a typical Wind vent.
This product operates off a thermostat control and while temperatures exceed the variable thermostat, will run NIGHT and DAY. Using less then $30 per year of power this is an effective way of cooling your roof space day and night.

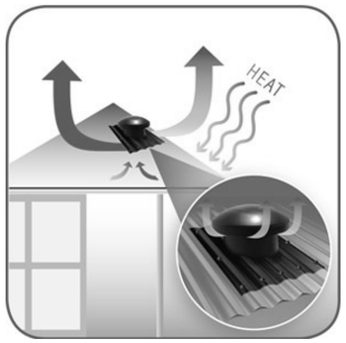
The installation of a roof ventilation system is important for any house, to make your home more energy efficient. A hot roof space transfers heat into your living spaces, which means increased temperatures and costly electricity bills. Moisture derived from high humidity levels in the home causes damage to your roof structure. Moisture can also saturate insulation, promote fungal decay and plywood delamination. With the new energy-efficient building programs being introduced by the government and the Building Code of Australia, all consideration should be given to meet new standards and to make your home more comfortable as well as reducing energy costs.





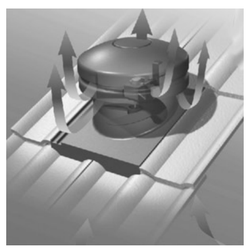
Double Cap Thermostat Motor Ventilation

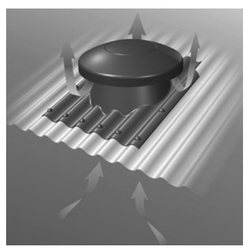
- Operates without the need for wind
- System automatically turns on when needed
- Rating 820 M3/hr
- Warranty: 2 year motor, 7 year flashing and vent cap
- 1 double cap thermostat motor vent equals to 7 wind vents



Single Cap Motor Ventilation

- Operates without the need for wind
- Optional thermostat
- Rating 520 M3/hr
- Warranty: 2 year motor, 7 year flashing and vent cap





Single Cap Stat Ventilation:

- Operates without the need for wind
- Warranty: 7 year flashing and vent cap
- Operates on thermo convection allowing hot air to escape from roof cavity

Accessories

Enviromax powered roof ventilator – Thermostat control switch
The easiest way to control the temperature limit for your motorised roof vents to activate. The system automatically turns on and off.

Features of the Solar Star Roof Ventilation System Include

Solar Star
Roof Mount 1200

Solar Star
Roof Mount 1600

Residential Quantity Guidelines

Roof Zone size (m^2)	Roof Pitch (up to 18°)	Roof Pitch (19-34°)
74	1 x 1200	1 x 1200
111.5	1 x 1200	1 x 1200
149	2 x 1200 or 1 x 1600	1 x 1600
186	1 x 1600	2 x 1600
223	2 x 1600	2 x 1600

1. Performance
There are many performance claims made on the market, but solar powered roof ventilation is going to make a substantial difference compared to wind vents. What are the most important things you need to review when purchasing roof ventilation?

The best way to know if you are getting value is understanding the wattage of the solar panel and the diameter of the extraction fan. While there are other variables this will provide you with the simplest and easiest comparison.

2. Installation
With many imports being shipped directly from overseas, consumers need to be careful selecting product for harsh environments such as Australia. A single, one-size- fits-all flashing creates similar issues with leaking as in traditional low-quality skylights. Consumers should always look for roof flashing's that are tailored to the contours of their roof.

Spring | Summer | Autumn | Winter

Summer means longer days, more sun, and warmer temperatures. If heat isn't vented from your roof space properly, it builds up & causes problems in your home:

- Living spaces become hot and uncomfortable
- Air conditioning units work harder to keep rooms cool
- Utility costs rise due to increased energy demand
- Roof structures and materials deteriorate

A Solar Star Roof Ventilation System solves these problems by removing excess heat from your home, giving you a more comfortable interior and lower energy bills.

With winter comes ice, snow, and cold temperatures. When coupled with excess humidity from showers, humidifiers, and dishwashers, it can lead to:

- Damage to insulation and framing materials produced by moisture accumulation
- Weakening of internal structures caused by mold and fungus growth

A Solar Star Roof Ventilation System prevents these issues by equalizing interior and exterior temperatures, safeguarding your home from the worst of winter.

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