

Please note this is a design and construct submission. Assumptions have been made as to the preliminary design requirements to meet NCC, Australian Standards and site-specific requirements. Differences between final engineering and design, and the proposal provided including product design and specification, may be required and will be priced accordingly.

Building Classification

The building classification is assumed as Class 5 (for the office section).
The building classification for the shed is Class 7b for the workshop section and Class 8 for the warehouse/store section.

Wind Classification

Precast walls are designed to 14kPa blast overpressure.
Office building designed to C4 wind classification.
Workshop and store designed to C3 wind classification.

Structure

- **Precast** – to be confirmed
- **Slab** - Raft slab on ground with 400wx400 deep edge beams with 3-11TM bottom measured from top of slab height for external walls assumed constructed on min 150kPa controlled fill (fill by CLIENT).
Slab thickness – office area 125mm SL82 top.
Above design is pending geotechnical report and structural engineering design and provided as a guide only.
StructureCorp is completing the detailed earthworks, metal dust, reinforcing steel and concreting including the supply of all engineering, labour and materials to complete the above.
Slab thickness – workshop 175mm SL92 top layer (pending engineering assessment of required forklift load) with 800mm dia x 900mm deep piers
- **Wall and roof structure** is prefabricated cold-rolled steel frame installed on-site.
Verandahs to be constructed to steel frame manufacturers details. Steel columns can be painted. The manufacturer is to provide engineering suitable for the building classification identified.

Architectural and Finishes

- **Walls** are constructed of prefabricated cold rolled steel frame.
- **Ceilings** – height is 2.7m. Ceilings are 10mm plasterboard except in wet areas and warehouse which are 10mm MR plasterboard.
- **Insulation:**
All external walls to office building to be R2.7 min plus thermal break (Aircell Insulbreak 45), roof R4.8 min (R1.3 roof and R3.5 ceiling) floor is slab on ground (Subject to Section J thermal efficiency report).
All roof insulation to workshop building is to be R1.3 roof with no wall insulation nominated.
- **Internal linings:**
General areas - 13mm plasterboard internal wall and ceiling lining – paint finish.

Wet areas – 13mm MR plasterboard or 6mm villabord to wet areas – Either painted or ceramic wall tiles to select areas including splashbacks and shower areas to comply with min NCC requirements depending on room requirement (tiled for bathrooms and laundry)
Paint colour – whisper white, doors and architraves all Colorbond basalt.

▪ **Floor finishes:**

Commercial vinyl planks specified throughout the building with the exception of the managers, meeting room and control room, and wet areas.

Product: GH Commercial Regent 1500 or suitable equivalent.



Timber vinyl planks

No flooring to workshop.

Carpet tiles to managers, meeting room and control room.

Product: GH Commercial Territory or suitable equivalent.



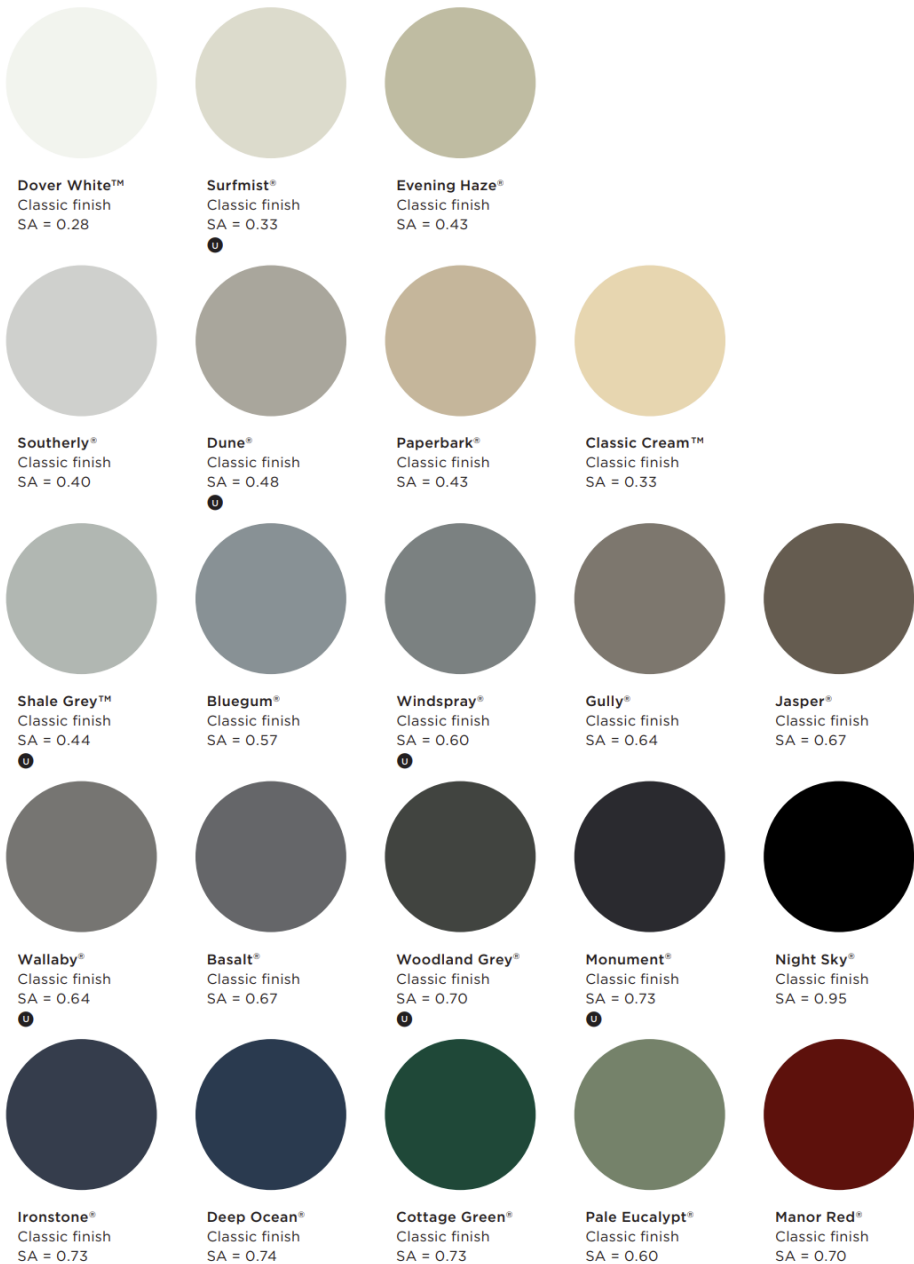
Ceramic floor tiles to Laundry, Male/Female Toilets.

Waterproofing to wet areas as per NCC requirements.

▪ **External Finishes / Cladding:**

Roofing – Trimdek or equivalent 0.42mm to manufacturer’s recommendations. Rofer. R1.3 Anticon blanket to roof. Cladding to include any battening required. Note the thickness and insulation may change pending client review. Fixings to required wind classification in previous section.

- Colorbond Half-round gutters and PVC downpipes are fitted down to floor level.
- Wall Cladding - Colorbond Trimdeck 0.42mm with roofing screw fixed to manufacturers recommendations. Colour to be determined during design phase.



Colorbond range for selection – walls, roof, flashings, gutter

- **Internal Doors:** Hollow core except for control and comms to be solid core.
- **External Doors:** Solid core external grade including rebated for double doors.
- **Door Jambs:** Quick fit door jambs and doors pre-hung.
- **Architraves and Skirting:** 12mm thickness/70mm painted skirting and architraves
- **Windows:** To meet Section J requirements for climate zone (Newcastle NSW) single glazed safety glass pending Section J report during design phase.

Preliminary window schedule subject to Section J requirements

- **Prefabricated covered verandah** with steel support posts, Building roof line over verandah area, NIL balustrade. Verandah slab is 100mm concrete slab on ground.
- **Stairs:** NIL
- **Accessible Ramp:** NIL
- **Kitchen:** Kitchen cabinetry and fixed benchtop.
All benchtops to be laminate with bull nose edge. All doors to be coloured melamine standard range finish, All carcasses to be white MHR board.
Provisions for all whitegoods – Dishwasher, Oven, Fridge, and Microwave, SS. Sink, Tile Splashback.(whitegoods supply and install by CLIENT or end-user).
- **Skylights** – no skylights due to overpressure.
- **Roof anchor points** – Temporary roof anchor points enabling temporary static line or harness points will be provided as required. Permanent anchor points may be provided on request from client.
- **Blinds** – standard finish back roll block-out commercial blinds to be provided for external windows to provide blockout for computer monitors and other work.
- **Amenities:**
 - Male bath and changerooms:**
PC items as per plans to be supplied by StructureCorp and installed by plumber.
 - Female bath and changerooms:**
PC items as per plans to be supplied by StructureCorp and installed by plumber.
 - Kitchen / Lunchroom consisting of:** (coloured)
- Listed Whitegoods shown in (Additional / Optional Items) if requested otherwise supplied and installed by client.
- Lockers may be shown in (Additional / Optional Items)
- **Laundry:** no laundry required.

Hydraulic

- Underground services to within 5m of the building (client to connect sewer and stormwater from these points or provide pits to drain into).
- Assume existing water supply is available. Allow for 15m pipework run to building from water supply and 3m between the workshop and office building. Supply suitable system for provision of potable water to the Office building and workshop.
- Eye wash to the workshop may be requested by client (can be included later if required)
- PC items as per Reece Plumbing presentation.
- Supply and installation of downpipes to gutter including any underground work required as per above stormwater scope within distances noted.
- Hot water circulation system may be added if this is deemed required. Due to the small size of the building and small pipe runs this is not recommended at this stage.
- All pits, pipework

ELECTRICAL, DATA, LIGHTING

▪ Point of Entry

- All electrical, data, security including pits, cable runs and terminations into the mains in the Office building, are to be completed by Client based on whole-of-site engineering plan and location of critical services.

▪ Data

Suitable data/communications system with communications rack. Please mark-up eg. double data on plan. Fire connection to data rack by client.

▪ Switchboards (alternatives can be provided to meet requirements)

- Emergency Test Stations
- additional contactor for emergency lighting
- DB to office building suitable size with spares
- DB to workshop building suitable size with spares
- Meter panels
- RCDs
- Isolator – AC Circuit
- supply and installation of PE cells to external lighting
- no solar array due to overpressure

▪ lighting (alternative specification can be provided)

- suitable lighting to be proposed by electrician – please provide lighting mark-u.

▪ Power

- Suitable DGPOs and other

▪ Security (not in this scope)

Access Control

- All external doors shall be lockable, and accessible using a common key fob. Alarm

- Design and construct an appropriate alarm system.

CCTV

- Design and construct an appropriate CCTV system.
- Please provide mark-up plan of proposed system and products to be used.

- **UPS –Additional / Optional items provide as Provisional Sum – Alternatives may be provided.**

- Provisional sum – allow 5 minutes of run time to the office before diesel back-up.

Security

- Suitable security system with security panels to workshop and office buildings and layout (please provide mark-up with submission) inclusive of external CCTV. Provide mark-up with submission.

Dry Fire

- Suitable dry fire system to both buildings with FIP in the office building including commissioning. Provide mark-up with submission.

Conduits, Pits and Underground Pipework

All conduits, pits and underground pipework for electrical services into the slab, and terminations will be completed by the client.

Heating, Ventilation and Airconditioning (HVAC)

Preliminary HVAC Design

Please provide preliminary HVAC design noting makes/models proposed to comply with NCC and Australian Standards for the relevant building classification.

Air Conditioning Systems:

- Supply and install all new Mitsubishi or Daiken VRV reverse cycle air conditioning system as per the provided specification.

Electrical & Control Wiring:

- Supply and installation of all associated electrical and control wiring for complete VRV system operation.

Air Supply & Exhaust:

- Supply and install all new Fantech supply air fan for fresh air system, interlocked with the air conditioning systems.
- Supply and install all new Fantech exhaust fan as per specification.

Ductwork & Accessories:

- Supply and install all new flexible ductwork, dampers, cushion boxes, grilles, louvres, and diffusers.

- Supply and install all new insulated and non-insulated supply, return, and exhaust air ductwork according to the specifications and drawings provided to meet BCA compliance inclusive of all fixtures and supports.

Pipework & Fixings:

- Supply, install, test, and commission all interconnecting mechanical copper pipework inclusive of valves, brackets, and fixings.

Mechanical Controls:

- Supply and install mechanical controls required for the new plant and equipment.

Documentation & Compliance:

- Provision for as-built documentation.
- Provision for air balancing.
- Provision for testing and commissioning.
- Provide operating and maintenance manuals.
- Issue certificate of installation compliance upon completion.

Warranty & Maintenance:

- 12 Months DLP and warranty maintenance.

Fire Extinguishers and Fire Separation

- No fire separation is deemed to be required between the workshop and storeroom. Flammable items will be stored in separate specialist enclosures supplied and installed by the client elsewhere on the site.
- Fire extinguishers are to be installed as per Australian Standard and NCC. Provisional sum will be allowed subject to engineer design drawings.

If there any discrepancy between engineer design drawings and the above tender specification and drawings supplied during the tender, a price adjustment is to be made to the contract sum. This variation may represent a saving or an additional cost to the project.

Electrical Works: All wiring is to conform to relevant codes and standards. The Electrician is to run all services within the wall / ceiling cavities to the internal circuit breaker board with an exterior connection point for connection to site power by the site electrician.

Compliance: All works relating to this project are to meet the NCC and relevant Australian Standards (only to the works undertaken herein).

No roof ventilators nominated to office building or workshop due to potential overpressure.



PRELIMINARY WALL FRAME AND TRUSS LAYOUT (to be completed)

CONFIDENTIAL



HUNTER VALLEY HYDROGEN HUB
Office Building and Workshop
Specification Rev 0 16 October 2023



CONFIDENTIAL



STRUCTURECORP
Building and Infrastructure

NOT TO BE DISTRIBUTED

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FURNITURE (to be proposed similar or better products)


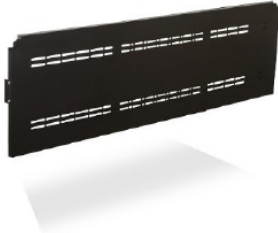
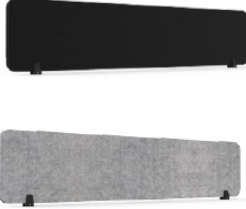

Image	Name / SKU	Notes
	<p>Rapid Eternity Single sided corner workstation 1800 x 1500 x 750</p>	
	<p>Vertilift extendable modesty panel</p>	
	<p>Eco panel desk mount screen 1790W x 384H black or marble grey</p>	
	<p>Side mount screen</p>	



Image	Name / SKU	Notes
	<p>Deluxe Rapid Infinity 6 Person workstation with screens. 1500 x 750 work tops with scallop for cable management.</p>	<p>Black or white frame with white or oak tops black frame grey screens, white frame black screen fabric.</p>
	<p>Deluxe Rapid Infinity Single workstation with screen 1500 x 750 top.</p>	<p>Black or white frame with white or oak tops black frame grey screens, white frame black screen fabric.</p>
	<p>Deluxe Rapid Infinity 4 Person workstation No Screens. 1500 x 750 top with cable access Scallop</p>	<p>Black or white frame with white or oak tops</p>
	<p>Steelfurn mobile drawer unit 2 personal and 1 file drawer.</p>	





Image	Name / SKU	Notes
	<p>Rio 3 lever mesh back task chair. comfortable body contoured seat and back rest, with ratchet back height mechanism.</p>	
	<p>Deluxe Rapid Infinity Workstation 1800 x 1800 x 750</p>	
	<p>Square Table 900 x 900 with black disc base</p>	
	<p>Eternity High Bar Table 1500 x 750 x 1050H</p>	




Image	Name / SKU	Notes
	<p>Virgo timber leg chair black shell and grey fabric</p>	
	<p>Virgo Stool Timber Legs, with black, grey or green shell</p>	
	<p>Typhoon Flip Table 1800W x 750 D</p>	
	<p>WMCC Chair Visitors Chair black mesh and black fabric</p>	

Image	Name / SKU	Notes
	<p>Tonic sled base chair in red and charcoal fabric</p>	
	<p>Round coffee table 600 Dia x 450H with black disc base</p>	