

UNIVERSITY OF ADELAIDE PLANT ACCELERATOR WAITE CAMPUS / ROOM DATA SHEET

Room No. **253 & 254** Level:  Lv 1 / Lower Ground  Lv 2 / Upper Ground  Other

Room Name **VIP GREENHOUSE (PC2 CAPABLE) (COMPLETED)**

Contact [REDACTED] Extension [REDACTED]

Briefed Area **22.5 & 23 sqm** Hours of operation **24 hours**

Windows:  Yes  Desirable  No  High Type of room population  Student  Staff  Other

Ceiling Height **3.5 m** truss soffit, **4.0 m** pitch & **5.0 m** ridge Acoustic separation  Not Required

Door type / width  1000 + 1000 (1800 clear) Top Hung Double Sliding Doors with clear floor access

Door type / construction  Sliding Metal Framed Door with transparent panel over robust panel to 900 mm

**Description of usage:**

Special requirement Greenhouse  
Possibly for Rice Growing

**Relationship with other functions:**

Nothing Special

**Greenhouse Characteristics**

<input type="checkbox"/> Conveyor Required	<input checked="" type="checkbox"/> Evaporative Cooling	<b>Summer Design Max Internal Temp:</b> 25.0°C <b>Winter Design Min Internal Temp:</b> 18.0°C <b>Humidity Range:</b> 90% max & 50% Min <b>Air Velocity Range:</b> Variable <b>Comments:</b> A/C & Evap cooling 18-25o Day Set point at +/-2o
<input type="checkbox"/> Imaging Required	<input checked="" type="checkbox"/> A/C	
<input type="checkbox"/> PC2 Operational	<input type="checkbox"/> Infra Red Required	
<input checked="" type="checkbox"/> PC2 Capable	<input type="checkbox"/> UV Required	
	<input type="checkbox"/> CO2 Required	

**Individual environment control requirements**

<input type="checkbox"/> Require individual environment control	<b>Comments:</b> One air handling unit per greenhouse and backup by onsite spare parts and portable plant.
<input checked="" type="checkbox"/> Ability to program daily temperature profiles	
<input checked="" type="checkbox"/> Ability to program artificial light operation times	

**Ventilation**

<input checked="" type="checkbox"/> Openable ridge section	<input type="checkbox"/> Fume Cupboard	<b>Comments:</b> Openable transparent section with insect mesh at ridge and automated. Confirm quantity. Face open panels to avoid winds, option for panels in east and west rooves to allow direction to suit winds, control by BAS / Weather Station.
<input type="checkbox"/> No Openable window	<input type="checkbox"/> Heat Rejection	
<input type="checkbox"/> Fume Exhaust	<input type="checkbox"/> Special exhausting	

**Special Contamination Requirements**

<input type="checkbox"/> Clean Room Standard	<input type="checkbox"/> AQIS Standard	<b>Comments:</b> May be PC2 Operational in the future.
<input type="checkbox"/> High Grade Filtration	<input type="checkbox"/> Other	
<input type="checkbox"/> PC2		

**Acoustic Environment**

<input checked="" type="checkbox"/> No requirement	<input type="checkbox"/> Standard meeting	<b>Comments:</b> No requirement
<input type="checkbox"/> Listening / teaching	<input type="checkbox"/> Standard office	
<input type="checkbox"/> Standard laboratory	<input type="checkbox"/> Other	

**Power**

<input type="checkbox"/> Normal	<input type="checkbox"/> 3 phase supply	<b>Comments:</b> Power outlets water prof and mounted to dado wall at 900 mm top of outlet.
<input type="checkbox"/> Special	<input type="checkbox"/> Flame / spark proof	
<input type="checkbox"/> Cleaning Only	<input type="checkbox"/> UPS Connected	
<input type="checkbox"/> Clean Power	<input type="checkbox"/> EMF Sensitive	
<input type="checkbox"/> Emergency Shutdown	<input checked="" type="checkbox"/> All DGPO connected to Generator	
2 x DGPO		
2 x DGPO with BMS control		

**Cable Reticulation Location**

<input type="checkbox"/> Ceiling	<input checked="" type="checkbox"/> Walls	<b>Comments:</b> Power outlets water proofed and mounted to dado wall at 900 mm top of outlet
<input type="checkbox"/> Floor	<input type="checkbox"/> Duct Low	
<input type="checkbox"/> Duct High	<input type="checkbox"/> Tray	

**Communications**

<input checked="" type="checkbox"/> Comms	<input type="checkbox"/> Tele conference	<b>Comments:</b> 2 x Dual Comms point to allow IP Cameras
<input type="checkbox"/> TV access	<input type="checkbox"/> Video conference	
<input type="checkbox"/> Special AV	<input type="checkbox"/> Public address	
	<input type="checkbox"/> Other	

**Lighting**

<input type="checkbox"/> Normal	<b>Comments:</b> Fluoro Night Light / weather proof Indicator light outside room to confirm Night Light illuminated. Additional Metal Halide with ballast and remote controls. Radiance levels 10 micromols / sqm / second.
<input checked="" type="checkbox"/> Special Lux Level	
<input checked="" type="checkbox"/> Programmable Controls	
<input type="checkbox"/> Special	

**Blinds / Thermal Screening**

<input checked="" type="checkbox"/> Blackout	<input type="checkbox"/> Venetian	<input type="checkbox"/> Rollerblind	<b>Comments:</b> Automated Blackout blinds behind the glass. Horizontal White Blind under roof to reduce day loads and night heat loss. Nominally 50% transmission. BMS controls to be enabled in response to environment parameters. BMS controls to be heavily dampened to avoid excessive movement. Glorified shade cloth on cables with motorised controls / One motor operating several glasshouses. Option for manual operation, especially for smaller Glasshouses such as these
<input type="checkbox"/> Thermal Screening	<input checked="" type="checkbox"/> Motorized and BMS controlled		

**Specialised Gases**

<input type="checkbox"/> CO2	<input type="checkbox"/> Natural Gas	<input type="checkbox"/> Nitrogen	<b>Comments:</b> No Requirement
<input type="checkbox"/> Compressed Air	<input type="checkbox"/> Other Gases		

**Fire Safety**

<input checked="" type="checkbox"/> Normal	<b>Comments:</b> Standard
<input type="checkbox"/> Early warning detection	
<input type="checkbox"/> Special suppression	

**Fire Services**

<input checked="" type="checkbox"/> Normal	<input type="checkbox"/> Smoke detectors	<b>Extinguishers</b> <input checked="" type="checkbox"/> Water <input type="checkbox"/> Special <input type="checkbox"/> CO2 To suit BCA
<input type="checkbox"/> No smoke detectors	<input type="checkbox"/> Sprinklers	
<input type="checkbox"/> VESDA		

**Hydraulic Services**

<input checked="" type="checkbox"/> Required	<input checked="" type="checkbox"/> 1 x RO water tap	<b>Comments:</b> Taps mounted to the dado and RO water to either sides of room. Allow for UOA supplied and operated portable Fogging Unit Require water supply to fogging unit BMS controlled Solenoids required behind one tap.
<input type="checkbox"/> Floor Waste	<input checked="" type="checkbox"/> Recycled/Blended Water	
<input checked="" type="checkbox"/> Floor Waste requires Screening & Bucket Trap	<input checked="" type="checkbox"/> 1 x Potable Water connection with double head taps	
<input type="checkbox"/> Oils/Solvent waste	<input checked="" type="checkbox"/> AQIS water Containment	
<input type="checkbox"/> Process Use Water		
<input type="checkbox"/> Chemical Waste		
<input type="checkbox"/> Emergency Shr		
<input type="checkbox"/> Eye Wash		

**Special floor loadings**

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<b>Comments:</b> Require 100mm diameter sealable hole for future services near the perimeter wall
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**Security**

<input checked="" type="checkbox"/> Lockable	<input type="checkbox"/> Keypad	<input type="checkbox"/> Proximity	<input type="checkbox"/> CCTV	<b>Comments:</b>
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**Locking**  Latch  Key  Proximity in  Proximity out  Magnetic  Special

**Floor Covering:**

Sealed Concrete finish to avoid water penetration and avoid excessive maintenance / reapplication requirements. Internal Geenhouse Walls unlikely to be relocated. UOA to confirm SARDI Specification.
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**Ceiling**  Not required  Timber  Acoustic Tile  Painted Concrete  Glass  Acrylic  Other

**Wall Finish**  Twin wall polycarb walling with some sections of vision glazing to corridor for visitor. Over sealed precast concrete dado, top of dado at 900 mm

**Target Wall STC**  None  25  35  45  55  65  85

**Audio Visual / Display**

<input checked="" type="checkbox"/> No requirement	<input type="checkbox"/> Speakers	<input type="checkbox"/> Slides	
<input type="checkbox"/> Pinboard	<input type="checkbox"/> Monitor	<input type="checkbox"/> CD Player	
<input type="checkbox"/> Whiteboard	<input type="checkbox"/> Amp / speakers	<input type="checkbox"/> DAT	
<input type="checkbox"/> Data Projector	<input type="checkbox"/> Elec. Whiteboard	<input type="checkbox"/> VCR	
<input type="checkbox"/> AV Screen	<input type="checkbox"/> Smart Board		

**Signage:**

Room Name and Number on Door
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**Furniture, Fittings and Equipment:**

REQUIRES REVIEW with ROBIN 4 + 4 x (700H x 1800L x 850W) Steel benches with mesh tops 4 x (700H x 1500L x 850W) Steel benches with mesh tops
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**Special Services Notes / Built in joinery / fixed fittings:** Not required