CLIENT BASELINE RISK ASSESSMENT FOR THE INSTALLATION OF AIR CONDITIONERS

DE005

OCTOBER 10, 2026

Document Control Sheet

DOCUMENT NAME	RISK ASSESSMENT		
AUTHOR	DEVAC (Pty) Ltd	DOC NO	DE005 / RA-01
PROJECT NAME	AIR-CONDITIONERS – Supply, Installation, Testing & Commissioning	COMMENCEMENT DATE	To be confirmed
ADDRESS / SITE	George Municipality – Directorate Community Services (as per Work Allocation DE005)		
Pr. CHS AGENT	De Munck Menderoi	WORK ALLOCATION NO	DE005
SCOPE SUMMARY	Supply, installation, testing and commissioning of 12 000 BTU and 9 000 BTU Midea Extreme inverter split air-conditioning units (indoor & outdoor) including 1-year compressor and parts warranty. Servicing of existing VRV air-conditioning system (inspection, cleaning of units/filters/coils, functional testing, minor adjustments).		
ESTIMATED DURATION	2 months (including pre- and post-construction)		

Signing of the Original Document
We, the undersigned, accept this document as a stable work product to be placed under formal change control as described in our internal Procedure for Controlled Documents.

Original	Prepared by	Reviewed by	Approved by
	De Munck Menderoi	Sophia Fanelo	Sophia Fanelo
Date: 10 October 2026	Signature	Signature	Signature

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Risk Rating Matrix and Sign-off pages follow at the end of this document.

Document No.	DE005 / RA-01	Task Based Risk Assessment	
Revision No.	1	Site / Installation	George Municipality – Air-Conditioners (DE005)
Date	October 2026	Location of Task	As per site allocation

1. SITE ACCESS, PREPARATION & HOUSEKEEPING											
ACTIVITY	HAZARD	CONSEQUENCE	S, H, E	L	C	IR	PLANNED TREATMENTS / CURRENT CONTROLS	REV S	REV L	RR	RESPONSIBLE PERSON
Site induction & access control	Unauthorised access; unfamiliar site conditions	Injury to workers or public; property damage	S,H	3	3	9	All personnel to undergo site-specific induction. Sign in/out register. Demarcate work area with barriers/cones and signage. Competent supervision on site.	2	2	4	Site Supervisor OHS Agent
Housekeeping & waste management	Slip, trip, fall; accumulation of packaging, off-cuts, refrigerant cylinders	Injuries; fire risk; environmental pollution	S,H,E	3	3	9	Maintain clear walkways. Segregate waste (general, recyclable, hazardous). Daily clean-up. Proper storage of materials and cylinders upright and secured.	1	2	2	Supervisor Employees
Working in operational buildings	Interference with building occupants; dust/noise nuisance	Public complaints; minor injuries	S,H	3	2	6	Coordinate with client/building management. Schedule noisy/dusty work outside peak occupancy where possible. Use dust sheets and barriers.	1	2	2	Contract Manager Supervisor

2. MANUAL HANDLING & LIFTING OF UNITS / MATERIALS											
ACTIVITY	HAZARD	CONSEQUENCE	S, H, E	L	C	IR	PLANNED TREATMENTS / CURRENT CONTROLS	REV S	REV L	RR	RESPONSIBLE PERSON
Lifting indoor & outdoor units (9k & 12k BTU)	Heavy/awkward loads; overreaching; poor posture	Back strain, musculoskeletal injury, crush injuries	H	4	4	16	Use two-person lift or mechanical aids (trolleys, hoists). Assess load weight. Training in correct lifting techniques. Do not exceed personal capability. Plan route and resting points.	2	2	4	Supervisor Employees
Carrying tools, pipework, brackets, cylinders	Manual handling of long/awkward items	Strains, trips, impact injuries	H	3	3	9	Use trolleys or team lifting. Keep loads close to body. Clear path before carrying. Secure cylinders on trolleys.	2	2	4	Supervisor Employees
Positioning outdoor unit on brackets / ground	Sudden load shift; pinching of fingers	Crush injuries, falls	S,H	3	3	9	Secure unit before final positioning. Use temporary supports. Wear gloves. Competent persons only.	2	2	4	Supervisor Employees

3. WORKING AT HEIGHTS / USE OF LADDERS & ACCESS EQUIPMENT											
ACTIVITY	HAZARD	CONSEQUENCE	S, H, E	L	C	IR	PLANNED TREATMENTS / CURRENT CONTROLS	REV S	REV L	RR	RESPONSIBLE PERSON
Using ladder to install indoor unit / access ceiling	Ladder slip, collapse, incorrect selection or placement	Fall from height – serious injury or fatality	S	4	5	20	Select correct ladder (industrial rated, non-conductive where electrical risk). Inspect before use. Place on firm level ground. 3-point contact. Secure ladder. Do not over-reach. Fall protection plan if >2 m. Competent trained persons only.	2	2	4	Supervisor Employees
Working on or near roof / elevated outdoor unit positions	Fall from height; unstable working platform	Serious injury / fatality	S	4	5	20	Where work exceeds 2 m or is high-risk, implement Fall Protection Plan (CR 10). Use scaffolding, MEWP or secured platforms where practicable. Edge protection or harness with anchor points. Competent supervision.	2	2	4	Construction Manager Supervisor
Working from ladder while handling tools/units	Dropping tools or materials; loss of balance	Struck-by injuries; falls	S,H	3	4	12	Tool lanyards or bags. Keep both hands free when climbing. Second person to foot ladder if required. Barricade area below.	2	2	4	Supervisor Employees

4. ELECTRICAL WORK & ISOLATION											
ACTIVITY	HAZARD	CONSEQUENCE	S, H, E	L	C	IR	PLANNED TREATMENTS / CURRENT CONTROLS	REV S	REV L	RR	RESPONSIBLE PERSON
Isolation of existing circuits / new power connections	Live electrical conductors; incorrect isolation	Electric shock, burns, electrocution, arc flash	S,H	4	5	20	Only competent & authorised electrical personnel. Lock-out / Tag-out (LOTO) procedure. Test for dead before work. Use insulated tools and appropriate PPE (voltage-rated gloves, etc.). Verify isolation.	2	2	4	Competent Electrician Supervisor
Working near existing electrical services	Contact with live services during drilling or cable routing	Shock, burns, fire	S,H	3	4	12	Scan for services (cable detector). Follow as-built drawings where available. Maintain safe distances. Competent persons only.	2	2	4	Supervisor Employees
Use of extension leads & portable electrical equipment	Damaged leads; overload; wet conditions	Shock, fire	S,H	3	3	9	Inspect leads and tools before use (PAT where applicable). Use RCD protection. Keep leads clear of walkways and water. Do not daisy-chain.	2	2	4	Supervisor Employees

5. DRILLING, CUTTING & WALL / CEILING PENETRATION											
ACTIVITY	HAZARD	CONSEQUENCE	S, H, E	L	C	IR	PLANNED TREATMENTS / CURRENT CONTROLS	REV S	REV L	RR	RESPONSIBLE PERSON
Drilling through walls / ceilings for pipework & cables	Concealed services (electrical, water, gas); flying debris; dust	Electrocution, water damage, eye/skin injury, silica dust exposure	S,H,E	4	4	16	Scan for services before drilling. Use appropriate PPE (safety glasses, dust mask/respirator, hearing protection). Dust extraction or wet methods where practicable. Barricade area. Competent persons.	2	2	4	Supervisor Employees
Cutting of pipework, brackets, trunking	Sharp edges; noise; vibration; flying particles	Cuts, hearing damage, hand-arm vibration	S,H	3	3	9	Correct tools for material. PPE (gloves, glasses, hearing protection). Secure workpiece. Rest breaks for vibrating tools.	2	2	4	Supervisor Employees
Making good / sealing penetrations	Dust; residual sharp materials	Respiratory irritation; cuts	H	2	2	4	PPE as required. Clean as you go. Dispose of waste correctly.	1	1	1	Employees

6. HANDLING OF REFRIGERANTS & HAZARDOUS CHEMICAL SUBSTANCES											
ACTIVITY	HAZARD	CONSEQUENCE	S, H, E	L	C	IR	PLANNED TREATMENTS / CURRENT CONTROLS	REV S	REV L	RR	RESPONSIBLE PERSON
Handling refrigerant cylinders (R-410A / other)	Leak / release of refrigerant under pressure; asphyxiation in confined space; frostbite	Asphyxiation, cold burns, environmental harm	S,H,E	3	4	12	Competent refrigerant handlers only (SARACCA registered where required). Store cylinders upright, secured, in well-ventilated area away from heat. Use correct gauges, hoses and recovery equipment. No smoking. MSDS available. PPE (gloves, eye protection).	2	2	4	Competent Technician Supervisor
Brazing / soldering of pipework (hot works)	Fire; burns; fumes; oxygen depletion	Burns, fire, respiratory injury	S,H,E	4	4	16	Hot Work Permit where required. Fire extinguisher and fire watch. Clear combustibles. Adequate ventilation. PPE (welding gloves, goggles, flame-resistant clothing). Competent persons only.	2	2	4	Supervisor Competent Person
Use of cleaning chemicals / coil cleaners during service	Chemical splash; inhalation; skin contact	Burns, irritation, respiratory effects	H	3	3	9	Refer to MSDS. Use correct PPE (gloves, eye protection, respirator if required). Work in ventilated area. Spill kit available. Training on chemical handling.	2	2	4	Supervisor Employees

7. USE OF HAND TOOLS & POWER TOOLS											
ACTIVITY	HAZARD	CONSEQUENCE	S, H, E	L	C	IR	PLANNED TREATMENTS / CURRENT CONTROLS	REV S	REV L	RR	RESPONSIBLE PERSON
Use of hand tools (screwdrivers, spanners, knives, etc.)	Slips of tool; damaged tools; incorrect tool for task	Cuts, punctures, eye injury	H	3	3	**9**	Inspect tools before use. Use correct tool for the job. Remove defective tools. PPE (gloves, eye protection where risk of flying particles).	2	2	**4**	Supervisor Employees
Use of power tools (drill, angle grinder, etc.)	Kick-back; entanglement; noise; vibration; flying particles; electrical fault	Serious injury, hearing loss, HAVS	S,H	3	4	**12**	Competent trained operators. Guards in place. PPE (eye, hearing, gloves). Inspect tools and leads. RCD protection. Secure workpiece. Rest breaks for vibrating tools.	2	2	**4**	Supervisor Employees
Storage of tools	Tools left on floor or elevated surfaces; falling tools	Trip hazards; struck-by injuries	S,H	2	3	**6**	Store tools in bags or boxes when not in use. Do not leave tools on ladders or elevated positions. Good housekeeping.	1	2	**2**	Employees

8. SERVICING OF EXISTING VRV AIR-CONDITIONING SYSTEM											
ACTIVITY	HAZARD	CONSEQUENCE	S, H, E	L	C	IR	PLANNED TREATMENTS / CURRENT CONTROLS	REV S	REV L	RR	RESPONSIBLE PERSON
Inspection & cleaning of indoor/outdoor units, filters, coils	Access at height; residual refrigerant; dirty filters; electrical residual energy	Falls; exposure; slips; shock	S,H	3	3	**9**	Isolate power before opening panels. Follow manufacturer procedures. Use appropriate access equipment. PPE. Competent HVAC technicians.	2	2	**4**	Competent Technician Supervisor
Functional testing & minor adjustments	Unexpected system start-up; moving parts	Injury from moving parts; electrical hazard	S,H	3	3	**9**	Ensure isolation verified. Clear area of unauthorised persons. Follow safe testing sequence. Competent persons only.	2	2	**4**	Competent Technician
Travel to site & attendance	Road traffic; fatigue	Vehicle accident; injury	S	2	3	**6**	Valid driver's licence. Roadworthy vehicle. Fatigue management. Comply with traffic rules.	1	2	**2**	All personnel

9. TESTING, COMMISSIONING & HANDOVER											
ACTIVITY	HAZARD	CONSEQUENCE	S, H, E	L	C	IR	PLANNED TREATMENTS / CURRENT CONTROLS	REV S	REV L	RR	RESPONSIBLE PERSON
Pressure testing / leak testing of pipework	System under pressure; sudden release	Injury from flying debris or refrigerant; environmental release	S,H,E	3	4	**12**	Use nitrogen for pressure testing where appropriate. Competent persons. PPE. Exclusion zone. Proper recovery of refrigerant. Follow manufacturer & SANS procedures.	2	2	**4**	Competent Technician Supervisor
Electrical commissioning & start-up	Live circuits; incorrect connections	Shock, equipment damage, fire	S,H	3	4	**12**	Competent electrician. Verify all connections and isolation points. Use correct test instruments. PPE.	2	2	**4**	Competent Electrician
Final handover & documentation	Incomplete information leading to future unsafe operation	Future incidents	S,H	2	2	**4**	Provide operating manuals, warranty documents, as-built information and maintenance instructions to client. Confirm training of client's nominated personnel if required.	1	1	**1**	Contract Manager

10. TRANSPORTATION & OFF-LOADING OF EQUIPMENT											
ACTIVITY	HAZARD	CONSEQUENCE	S, H, E	L	C	IR	PLANNED TREATMENTS / CURRENT CONTROLS	REV S	REV L	RR	RESPONSIBLE PERSON
Loading / off-loading units and materials from vehicle	Manual handling; falling objects; vehicle movement	Crush injuries; strains; struck-by	S,H	3	4	12	Use mechanical aids where possible. Secure loads on vehicle. Banksman / spotter during reversing. Clear exclusion zone. Team lifting for heavy items.	2	2	4	Supervisor Employees
Transport of refrigerant cylinders	Cylinder falling or valve damage; vehicle accident	Release of refrigerant; injury	S,H,E	3	3	9	Secure cylinders upright in vehicle with restraints. Valve protection caps fitted. Separate from passenger compartment where practicable. Competent driver.	2	2	4	Driver Supervisor

RISK RATING MATRIX

Severity (Consequences) × Likelihood

Severity \ Likelihood	<Low (1) Not credible	Low (2) Conceivable	Medium (3) Less than average	>Medium (4) More than average	High (5) Likely to occur
High (5) – Multiple deaths / major pollution	5	10	15	20	25
>Medium (4) – Single death / severe injury	4	8	12	16	20
Medium (3) – LTI / significant damage	3	6	9	12	15
Low (2) – First-aid / minor damage	2	4	6	8	10
<Low (1) – Negligible	1	2	3	4	5

1 – 6 MAY BE ACCEPTABLE: however, review task to see if risk can be reduced further.

8 – 12 TASK SHOULD ONLY PROCEED after consultation with personnel and assessment team. Where possible, the task should be redefined or the risk reduced further prior to commencement.

15 – 25 TASK MUST NOT PROCEED. Almost inevitable that an incident would result. Redefine or implement further controls and re-assess before commencement.

NOTES

- Construction Manager / Supervisor is responsible for review, implementation and monitoring of the risk assessments.
- This Task-Based Risk Assessment has been prepared on the known scope of works and can be re-evaluated on site by the Supervisor (and where applicable the designated client representative) by walking the site to confirm that all hazards have been correctly identified and the appropriate control measures are in place.
- Personnel are required to wear all relevant PPE for the tasks being performed (as a minimum: safety shoes, high-visibility vest, hard hat where overhead risk exists, eye protection, gloves as task requires).
- Work carried out under a Permit-to-Work system applies where required (Hot Work, Electrical Isolation, Working at Heights, Confined Space, etc.).
- **WHERE THE ACTIVITY, HAZARDS OR RISKS CHANGE THE SUPERVISOR MUST STOP THE JOB, REVISE THIS RISK ASSESSMENT AND DISCUSS / TRAIN THE RELEVANT EMPLOYEES BEFORE RECOMMENCING WORK.**

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