RISK ASSESSMENT AND METHOD STATEMENT (RAMS)

Business name

Document: RAMS-001 Rev 1
Prepared: 9 Nov 2026
Review by: 9 Dec 2026
Highest risk after controls: Medium

1. BUSINESS AND JOB DETAILS

Job	Refrigerant leak repair and regas	**Start date**	9 Nov 2026
Working hours	7:00 am to 3:30 pm	**Trade**	Heating and ventilation

2. RISK ASSESSMENT

#	Activity / step	Hazards	Who might be harmed and how	Risk before	Controls	Risk after	Responsible
1	Hold the right refrigerant licence or certification for the work	Refrigerant leaks Rules: Fluorinated Greenhouse Gases Regulations 2015	Workers, Occupants. How: Refrigerant gas causes frostbite, pushes oxygen out of small rooms, and some types catch fire.	**Medium (8) Unlikely / Major injury**	1.1 Recover refrigerant into an approved cylinder before opening the system. Never vent it. [Isolate] 1.2 Ventilate closed spaces and use a leak detector during the work. [Control (engineering)] 1.3 Refrigerant leaks: see step 3 for the full controls [Control (procedures)]	**Low (4) Very unlikely / Major injury**	Site supervisor
2	Isolate power, lock off and label	Electric shock from live wiring Rules: Electricity at Work Regulations 1989	Workers, Occupants. How: Contact with live wires, distribution boards or equipment gives an electric shock or arc flash burn that can kill.	**Very high (15) Possible / Fatal**	2.1 Isolate the power before any work. Do not work live. [Eliminate] 2.2 Lock out and tag the isolation point with your own personal lock and danger tag. [Isolate] 2.3 Prove dead at the point of work with an approved voltage indicator (GS38), and prove the tester before and after. [Control (engineering)] 2.4 Only competent, qualified electricians do electrical work, following a safe isolation procedure. [Control (procedures)] 2.5 Check for back feeds from solar, batteries and generators that can keep a circuit live after the main switch is off. [Control (procedures)] 2.6 If live work cannot be avoided, use a permit, a safety observer and insulated tools. [Control (procedures)] 2.7 Wear insulated gloves, arc-rated clothing and a face shield when testing or working near live parts. [PPE]	**Medium (5) Very unlikely / Fatal**	Site supervisor
3	Recover refrigerant into a cylinder, never vent it	Refrigerant leaks Stored energy Rules: Fluorinated Greenhouse Gases Regulations 2015	Workers, Occupants. How: Refrigerant gas causes frostbite, pushes oxygen out of small rooms, and some types catch fire. Energy left in springs, hydraulics, compressed gas, raised loads or capacitors	**Medium (8) Unlikely / Major injury**	3.1 Recover refrigerant into an approved cylinder before opening the system. Never vent it. [Isolate] 3.2 Ventilate closed spaces and use a leak detector during the work. [Control (engineering)] 3.3 Only F-gas certified engineers handle refrigerants. [Control (procedures)] 3.4 With flammable refrigerants (such as R32 or R290), remove ignition sources and use spark-free tools. [Control (procedures)] 3.5 Wear cold-rated gloves and safety glasses or a face shield.	**Low (4) Very unlikely / Major injury**	Site supervisor

#	Activity / step	Hazards	Who might be harmed and how	Risk before	Controls	Risk after	Responsible
			releases suddenly and crushes or injures workers.		[PPE] 3.6 Release or block all stored energy before work: release the pressure in pipes, tanks and hoses, bleed hydraulics, release springs, lower loads. [Eliminate] 3.7 Lock out and tag all energy sources with personal locks. [Isolate] 3.8 Put mechanical blocks or props under raised parts like buckets, tipper bodies and doors. [Control (engineering)] 3.9 Test that the system is dead and nothing can move before you start. [Control (procedures)] 3.10 Follow the maker's procedure, for example for garage door and roller door springs. [Control (procedures)] 3.11 Wear safety glasses and gloves. [PPE]		
4	Braze repairs under a hot work permit with nitrogen purge	Fire from hot works Burns from hot surfaces Confined space entry Rules: CDM 2015 regs 29 to 31 (fire on construction sites). Occupied premises: Regulatory Reform (Fire Safety) Order 2005 (England and Wales), Fire (Scotland) Act 2005, Fire Safety Regulations (NI) 2010; Confined Spaces Regulations 1997	Workers, Occupants, Public, Rescuers. How: Sparks and heat from welding, grinding or flame torches set fire to timber, insulation, rubbish or fuel nearby. Touching hot pipes, tools, bitumen, solder or freshly welded metal burns the skin.	**Very high (15) Possible / Fatal**	4.1 Use cold work methods where you can, such as bolting, press fittings or cutting with a saw instead of a torch. [Eliminate] 4.2 Move anything that can burn at least 10 metres away, or cover it with fire blankets. [Isolate] 4.3 Use fire-resistant screens to stop sparks reaching people or gaps in walls and floors. [Control (engineering)] 4.4 Get a hot work permit before starting. [Control (procedures)] 4.5 Keep a charged fire extinguisher and fire blanket at the work spot. [Control (procedures)] 4.6 Isolate heating systems and let parts cool before you touch them. [Eliminate] 4.7 Fit guards or insulation on hot pipes and equipment. [Control (engineering)] 4.8 Mark hot items with chalk or a "HOT" sign so others know. [Control (procedures)] 4.9 Keep a first aid kit and cool running water nearby for burns. [Control (procedures)] 4.10 Wear heat-resistant gloves and long sleeves. [PPE] 4.11 Do the work from outside the space where you can, using cameras or long-reach tools. [Eliminate] 4.12 Isolate and lock out all pipes, power and moving parts going into the space. [Isolate] 4.13 Test the air for oxygen, flammable and toxic gases before entry, and keep testing during the work. [Control (engineering)] 4.14 Use forced ventilation to keep the air clean. [Control (engineering)] 4.15 Issue a confined space entry permit before anyone goes in. Only trained workers enter. [Control (procedures)]	**Medium (5) Very unlikely / Fatal**	Site supervisor
5	Pressure test, evacuate and recharge	Pressure testing Refrigerant leaks Rules: Pressure Systems Safety	Workers, Occupants. How: A pipe, fitting or cap fails under test pressure and blows apart, hitting people	**Medium (8) Unlikely / Major injury**	5.1 Test with water instead of air or gas where the system allows it. Never put water in refrigerant pipework, which is tested with dry nitrogen. [Reduce / substitute] 5.2 Keep people out of the test area with signs and barriers. [Isolate] 5.3 Use a calibrated gauge and a relief valve set to protect the	**Low (4) Very unlikely / Major injury**	Site supervisor

#	Activity / step	Hazards	Who might be harmed and how	Risk before	Controls	Risk after	Responsible
		Regulations 2000; Fluorinated Greenhouse Gases Regulations 2015	nearby. Refrigerant gas causes frostbite, pushes oxygen out of small rooms, and some types catch fire.		system. [Control (engineering)] 5.4 Test to the pressure the system calls for and hold it for the set time. Never go over. [Control (procedures)] 5.5 Release the pressure fully before tightening anything or fixing leaks. [Control (procedures)] 5.6 Wear safety glasses or a face shield. [PPE] 5.7 Refrigerant leaks: see step 3 for the full controls [Control (procedures)]		
6	Record refrigerant used and clean up	Poor housekeeping and waste	Workers, Visitors. How: Rubbish, offcuts and materials left lying around cause trips, cuts and fires, and block exits.	**Medium (8) Likely / Minor injury**	6.1 Order materials to size and send packaging back where you can. [Eliminate] 6.2 Put skips and waste chutes close to the work. [Control (engineering)] 6.3 Clean as you go, and do a full clean up at the end of each day. [Control (procedures)] 6.4 Keep exits, stairs and walkways clear at all times. [Control (procedures)] 6.5 Stack materials neatly on level ground, away from edges. [Control (procedures)] 6.6 Use a registered waste carrier and keep waste transfer notes for at least 2 years. Keep hazardous waste such as asbestos separate, with consignment notes (special waste in Scotland). [Control (procedures)] 6.7 Wear gloves when handling waste. [PPE]	**Low (4) Unlikely / Minor injury**	Site supervisor

Risk key: risk = likelihood x consequence on a 5 x 5 matrix. Low, Medium, High, Very high. Work must not start while the risk after controls is high or above. Controls are listed in order of the hierarchy of control (eric-pd): Eliminate, Reduce / substitute, Isolate, Control (engineering), Control (procedures), PPE.

3. METHOD STATEMENT: SEQUENCE OF WORK

Step	What we will do	How it is done safely
1	Hold the right refrigerant licence or certification for the work	Recover refrigerant into an approved cylinder before opening the system. Never vent it. Ventilate closed spaces and use a leak detector during the work. Refrigerant leaks: see step 3 for the full controls
2	Isolate power, lock off and label	Isolate the power before any work. Do not work live. Lock out and tag the isolation point with your own personal lock and danger tag. Prove dead at the point of work with an approved voltage indicator (GS38), and prove the tester before and after.
3	Recover refrigerant into a cylinder, never vent it	Recover refrigerant into an approved cylinder before opening the system. Never vent it. Ventilate closed spaces and use a leak detector during the work. Only F-gas certified engineers handle refrigerants.
4	Braze repairs under a hot work permit with nitrogen purge	Use cold work methods where you can, such as bolting, press fittings or cutting with a saw instead of a torch. Move anything that can burn at least 10 metres away, or cover it with fire blankets. Use fire-resistant screens to stop sparks reaching people or gaps in walls and floors.
5	Pressure test, evacuate and recharge	Test with water instead of air or gas where the system allows it. Never put water in refrigerant pipework, which is tested with dry

Step	What we will do	How it is done safely
		nitrogen. Keep people out of the test area with signs and barriers. Use a calibrated gauge and a relief valve set to protect the system.
6	Record refrigerant used and clean up	Order materials to size and send packaging back where you can. Put skips and waste chutes close to the work. Clean as you go, and do a full clean up at the end of each day.

4. PPE AND PERMITS

Required PPE	Permits and plans
Safety glasses Rigger gloves Safety boots Face shield Insulated electrical gloves Arc-rated clothing and face shield Welding gauntlets Coveralls	Permit to work (electrical isolation) Hot works permit (fire watch at least 60 minutes after)

5. PLANT AND EQUIPMENT

Plant / equipment	Licence or training needed	Inspection needed	Rego / ID	Last inspected	Certificate / report
Hand tools					
Electrical test equipment (multifunction tester)		Check leads and probes meet HSE GS38 before each use; prove the voltage indicator on a proving unit before and after; calibrate at the maker's interval (usually yearly)			
Propane gas torch					

6. CREW COMPETENCY, TICKETS AND LICENCES

Crew listed at sign-on below, with ticket and licence numbers.

7. EMERGENCY ARRANGEMENTS

Emergency number	999	**First aid kit**	In the work vehicle
Fire extinguisher	In the work vehicle	**Alarm and evacuation**	Shout "Fire" or "Stop" and use the site alarm. Stop work, make the area safe and go to the assembly point. Do not go back in until the supervisor says it is safe.
Reporting incidents	Report reportable incidents to HSE under RIDDOR 2013 (hse.gov.uk/riddor).		

8. SITE ARRANGEMENTS

Welfare	Toilets, drinking water, hand washing and a break area on site	**Security and access**	Work area fenced or kept locked when unattended. Tools and materials secured. Public kept out.
Environmental and waste	Waste goes in a skip or the van and is taken away by a registered waste carrier, with waste transfer notes kept (duty of care). Hazardous waste such as asbestos is kept separate and consigned correctly. Dust and noise kept to a minimum. No run-off into drains.		

9. MONITORING, REVIEW AND LEGAL BASIS

The supervisor checks the controls at the start of each shift and during the work. Stop work and review this RAMS if the work, the crew or the site conditions change, after any incident or near miss, or if the principal contractor asks.

Legal basis: Management of Health and Safety at Work Regulations 1999 and the Construction (Design and Management) Regulations 2015. Employers must assess the risks of their work and record the significant findings (required where you employ 5 or more people). On CDM projects, contractors give their RAMS to the principal contractor before starting, and brief the workers on it.

Keep this RAMS, every revision and the signed briefing register with the site file for the length of the job, and keep a copy in your records afterwards.

10. REVISION HISTORY

Rev	Date	By	What changed
1	9 Nov 2026		First issue

11. APPROVAL AND BRIEFING REGISTER

	Name	Signature	Date	
Prepared by				
Approved by				
Supervisor				
Principal contractor review				Accepted for use: Yes / No

By signing below, each person confirms this RAMS was explained to them in a site briefing, they understand it and will follow it, and they will stop work and tell the supervisor if anything changes.

Name	Role / company	Tickets / licences	Inducted	Signature	Date

Name	Role / company	Tickets / licences	Inducted	Signature	Date