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	Replace a hot water cylinder	**Start date**	9 Nov 2026
Working hours	7:00 am to 3:30 pm	**Trade**	Plumbing

2. RISK ASSESSMENT

#	Activity / step	Hazards	Who might be harmed and how	Risk before	Controls	Risk after	Responsible
1	Check access to the unit and plan the removal route through stairs, roof spaces or tight cupboards	Tight spaces: roof spaces and under floors Lifting and carrying heavy loads Rules: Manual Handling Operations Regulations 1992	Workers. How: Crawling through roof spaces, under floors or in tight ceilings leads to falls through the ceiling, heat stress, shocks and cuts. Lifting, carrying, pushing or twisting with heavy or awkward loads strains the back, shoulders or knees.	**High (12) Likely / Lost time injury**	1.1 Do as much of the work as you can from outside the tight space. [Eliminate] 1.2 Turn the power off at the consumer unit or distribution board before entering where you can, as damaged cables may be live. [Isolate] 1.3 Lay crawl boards across the joists so you cannot step through the ceiling. [Control (engineering)] 1.4 Set up ventilation and lighting in the space. [Control (engineering)] 1.5 Limit time in hot roof spaces and take breaks somewhere cool. [Control (procedures)] 1.6 Tell someone when you go in and when you are out. [Control (procedures)] 1.7 Wear a dust mask, knee pads, gloves and a bump cap. [PPE] 1.8 Plan to avoid carrying: have materials delivered, and old items picked up, as close as possible to where they are used. [Eliminate] 1.9 Use lighter or smaller loads: order smaller bags and shorter lengths, and drain or break down old items before moving them. [Reduce / substitute] 1.10 Use trolleys, pallet jacks, hoists, vacuum lifters or plant instead of carrying by hand. [Control (engineering)] 1.11 Use a two-person lift for anything heavy, long or awkward. Plan the route first and clear it. [Control (procedures)] 1.12 Keep the load close, back straight and no twisting. Turn with your feet. [Control (procedures)] 1.13 Rotate tasks and take breaks on long lifting jobs. [Control (procedures)] 1.14 Wear gloves for grip and safety boots to protect your feet. [PPE]	**Medium (6) Unlikely / Lost time injury**	Site supervisor
2	Isolate power at the consumer unit and gas	Electric shock from live wiring	Workers, Occupants, Public.	**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	**Medium (5) Very unlikely / Fatal**	Site supervisor

#	Activity / step	Hazards	Who might be harmed and how	Risk before	Controls	Risk after	Responsible
	or water at the meter, lock off and label	Gas and fuel lines Stored energy Rules: Electricity at Work Regulations 1989; Gas Safety (Installation and Use) Regulations 1998	How: Contact with live wires, distribution boards or equipment gives an electric shock or arc flash burn that can kill. Damaging or opening a gas or fuel line causes a leak, fire or explosion.		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 Isolate and purge the line before work, with the owner's approval. [Eliminate] 2.7 Lock off and tag the isolation valve. [Isolate] 2.8 Gas and fuel lines: see step 8 for the full controls [Control (procedures)] 2.9 Release or block all stored energy before work: release the pressure in pipes, tanks and hoses, bleed hydraulics, release springs, lower loads. [Eliminate] 2.10 Lock out and tag all energy sources with personal locks. [Isolate] 2.11 Put mechanical blocks or props under raised parts like buckets, tipper bodies and doors. [Control (engineering)] 2.12 Test that the system is dead and nothing can move before you start. [Control (procedures)] 2.13 Follow the maker's procedure, for example for garage door and roller door springs. [Control (procedures)]		
3	Drain the old unit, watching for scalding water and steam	Hot water and steam Burns from hot surfaces Slips and trips	Workers, Occupants, Visitors, Public. How: Opening hot water systems, boilers or steam lines scalds workers. Touching hot pipes, tools, bitumen, solder or freshly welded metal burns the skin.	**Medium (8) Likely / Minor injury**	3.1 Turn the system off and let it cool before work. [Eliminate] 3.2 Isolate and lock off the heat source and valves, and release the pressure. [Isolate] 3.3 Hot water and steam: see step 9 for the full controls [Control (procedures)] 3.4 Isolate heating systems and let parts cool before you touch them. [Eliminate] 3.5 Fit guards or insulation on hot pipes and equipment. [Control (engineering)] 3.6 Mark hot items with chalk or a "HOT" sign so others know. [Control (procedures)] 3.7 Keep a first aid kit and cool running water nearby for burns. [Control (procedures)] 3.8 Wear heat-resistant gloves and long sleeves. [PPE] 3.9 Plan walkways and keep them clear of materials, hoses and leads. [Eliminate] 3.10 Run leads and hoses overhead on hooks or stands, or along walls, not across walkways. [Control (engineering)] 3.11 Fill or cover holes, and lay boards or mats on muddy access paths. [Control (engineering)] 3.12 Clean up offcuts, packaging and spills as you go, not at the end	**Low (4) Unlikely / Minor injury**	Site supervisor

#	Activity / step	Hazards	Who might be harmed and how	Risk before	Controls	Risk after	Responsible
					of the day. [Control (procedures)] 3.13 Keep work areas, stairs and access paths well lit. [Control (procedures)]		
4	Disconnect pipes, flue and wiring, and cap the gas line	Gas and fuel lines Electric shock from live wiring Cuts from sharp edges Rules: Gas Safety (Installation and Use) Regulations 1998; Electricity at Work Regulations 1989	Workers, Occupants, Public. How: Damaging or opening a gas or fuel line causes a leak, fire or explosion. Contact with live wires, distribution boards or equipment gives an electric shock or arc flash burn that can kill.	**Very high (15) Possible / Fatal**	4.1 Check for leaks with a gas detector before and during work, and ventilate the area. [Control (engineering)] 4.2 Only Gas Safe registered engineers work on gas fittings. [Control (procedures)] 4.3 Gas and fuel lines: see step 8 for the full controls [Control (procedures)] 4.4 If live work cannot be avoided, use a permit, a safety observer and insulated tools. [Control (procedures)] 4.5 Wear insulated gloves, arc-rated clothing and a face shield when testing or working near live parts. [PPE] 4.6 Electric shock from live wiring: see step 2 for the full controls [Control (procedures)] 4.7 Deburr or cover sharp edges, and fit edge protectors on exposed sheet metal. [Control (engineering)] 4.8 Use knives with retractable or self-retracting blades. [Control (engineering)] 4.9 Cuts from sharp edges: see step 5 for the full controls [Control (procedures)]	**Medium (5) Very unlikely / Fatal**	Site supervisor
5	Remove the old unit using a trolley and two people	Lifting and carrying heavy loads Cuts from sharp edges Rules: Manual Handling Operations Regulations 1992	Workers. How: Lifting, carrying, pushing or twisting with heavy or awkward loads strains the back, shoulders or knees. Sheet metal, glass, blades, cable tray and offcuts cut hands and arms.	**High (12) Likely / Lost time injury**	5.1 Lifting and carrying heavy loads: see step 1 for the full controls [Control (procedures)] 5.2 Deburr or cover sharp edges, and fit edge protectors on exposed sheet metal. [Control (engineering)] 5.3 Use knives with retractable or self-retracting blades. [Control (engineering)] 5.4 Cut away from your body and keep your other hand clear. [Control (procedures)] 5.5 Put used blades in a blade bin or sharps container. [Control (procedures)] 5.6 Use two people to handle large sheets of metal or glass. [Control (procedures)] 5.7 Wear cut-resistant gloves and long sleeves. [PPE]	**Medium (6) Unlikely / Lost time injury**	Site supervisor
6	Position and secure the new unit on a level base	Lifting and carrying heavy loads Tight spaces: roof spaces and under floors Rules: Manual Handling Operations Regulations 1992	Workers. How: Lifting, carrying, pushing or twisting with heavy or awkward loads strains the back, shoulders or knees. Crawling through roof spaces, under floors or in tight ceilings leads to falls through the ceiling,	**High (12) Likely / Lost time injury**	6.1 Lifting and carrying heavy loads: see step 1 for the full controls [Control (procedures)] 6.2 Tight spaces: roof spaces and under floors: see step 1 for the full controls [Control (procedures)]	**Medium (6) Unlikely / Lost time injury**	Site supervisor

#	Activity / step	Hazards	Who might be harmed and how	Risk before	Controls	Risk after	Responsible
			heat stress, shocks and cuts.				
7	Make pipe joins, with a hot work permit and an extinguisher at hand if soldering or brazing	Fire from hot works Burns from hot surfaces 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	Workers, Occupants, Public. 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**	7.1 Use cold work methods where you can, such as bolting, press fittings or cutting with a saw instead of a torch. [Eliminate] 7.2 Move anything that can burn at least 10 metres away, or cover it with fire blankets. [Isolate] 7.3 Use fire-resistant screens to stop sparks reaching people or gaps in walls and floors. [Control (engineering)] 7.4 Get a hot work permit before starting. [Control (procedures)] 7.5 Keep a charged fire extinguisher and fire blanket at the work spot. [Control (procedures)] 7.6 Keep a fire watch during the work and for at least 60 minutes after you finish. [Control (procedures)] 7.7 Check for smouldering behind walls, in ceilings and under floors before you leave. [Control (procedures)] 7.8 Wear flame-resistant clothing, welding gloves and eye or face protection. [PPE] 7.9 Burns from hot surfaces: see step 3 for the full controls [Control (procedures)]	**Medium (5) Very unlikely / Fatal**	Site supervisor
8	Reconnect gas (by a Gas Safe registered engineer) and power (by a qualified electrician), then leak test	Gas and fuel lines Pressure testing Electric shock from live wiring Rules: Gas Safety (Installation and Use) Regulations 1998; Pressure Systems Safety Regulations 2000; Electricity at Work Regulations 1989	Workers, Occupants, Public. How: Damaging or opening a gas or fuel line causes a leak, fire or explosion. A pipe, fitting or cap fails under test pressure and blows apart, hitting people nearby.	**Very high (15) Possible / Fatal**	8.1 Isolate and purge the line before work, with the owner's approval. [Eliminate] 8.2 Lock off and tag the isolation valve. [Isolate] 8.3 Check for leaks with a gas detector before and during work, and ventilate the area. [Control (engineering)] 8.4 Only Gas Safe registered engineers work on gas fittings. [Control (procedures)] 8.5 Remove ignition sources: no smoking, no hot work and no sparking tools near the line. [Control (procedures)] 8.6 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] 8.7 Keep people out of the test area with signs and barriers. [Isolate] 8.8 Pressure testing: see step 9 for the full controls [Control (procedures)] 8.9 Electric shock from live wiring: see step 2 for the full controls [Control (procedures)]	**Medium (5) Very unlikely / Fatal**	Site supervisor
9	Fill and purge air, check the relief valve, commission and set the temperature	Hot water and steam Pressure testing Rules: Pressure Systems Safety Regulations 2000	Workers, Occupants. How: Opening hot water systems, boilers or steam lines scalds workers. A pipe, fitting or cap fails under test pressure and blows apart, hitting people	**Medium (8) Unlikely / Major injury**	9.1 Turn the system off and let it cool before work. [Eliminate] 9.2 Isolate and lock off the heat source and valves, and release the pressure. [Isolate] 9.3 Check the temperature, and open fittings slowly while facing away. [Control (procedures)] 9.4 Keep a first aid kit and cool water ready for burns. [Control (procedures)] 9.5 Wear heat-resistant gloves, long sleeves and 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
			nearby.		[PPE] 9.6 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] 9.7 Keep people out of the test area with signs and barriers. [Isolate] 9.8 Use a calibrated gauge and a relief valve set to protect the system. [Control (engineering)] 9.9 Test to the pressure the system calls for and hold it for the set time. Never go over. [Control (procedures)] 9.10 Release the pressure fully before tightening anything or fixing leaks. [Control (procedures)] 9.11 Wear safety glasses or a face shield. [PPE]		
10	Take the old unit off site and clean up	Lifting and carrying heavy loads Poor housekeeping and waste Rules: Manual Handling Operations Regulations 1992	Workers, Visitors. How: Lifting, carrying, pushing or twisting with heavy or awkward loads strains the back, shoulders or knees. Rubbish, offcuts and materials left lying around cause trips, cuts and fires, and block exits.	**High (12) Likely / Lost time injury**	10.1 Lifting and carrying heavy loads: see step 1 for the full controls [Control (procedures)] 10.2 Order materials to size and send packaging back where you can. [Eliminate] 10.3 Put skips and waste chutes close to the work. [Control (engineering)] 10.4 Clean as you go, and do a full clean up at the end of each day. [Control (procedures)] 10.5 Keep exits, stairs and walkways clear at all times. [Control (procedures)] 10.6 Stack materials neatly on level ground, away from edges. [Control (procedures)] 10.7 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)] 10.8 Wear gloves when handling waste. [PPE]	**Medium (6) Unlikely / Lost time 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	Check access to the unit and plan the removal route through stairs, roof spaces or tight cupboards	Do as much of the work as you can from outside the tight space. Turn the power off at the consumer unit or distribution board before entering where you can, as damaged cables may be live. Lay crawl boards across the joists so you cannot step through the ceiling.
2	Isolate power at the consumer unit and gas or water at the meter, 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	Drain the old unit, watching for scalding water and steam	Turn the system off and let it cool before work. Isolate and lock off the heat source and valves, and release the pressure. Hot water and steam: see step 9 for the full controls

Step	What we will do	How it is done safely
4	Disconnect pipes, flue and wiring, and cap the gas line	Check for leaks with a gas detector before and during work, and ventilate the area. Only Gas Safe registered engineers work on gas fittings. Gas and fuel lines: see step 8 for the full controls
5	Remove the old unit using a trolley and two people	Lifting and carrying heavy loads: see step 1 for the full controls Deburr or cover sharp edges, and fit edge protectors on exposed sheet metal. Use knives with retractable or self-retracting blades.
6	Position and secure the new unit on a level base	Lifting and carrying heavy loads: see step 1 for the full controls Tight spaces: roof spaces and under floors: see step 1 for the full controls
7	Make pipe joins, with a hot work permit and an extinguisher at hand if soldering or brazing	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.
8	Reconnect gas (by a Gas Safe registered engineer) and power (by a qualified electrician), then leak test	Isolate and purge the line before work, with the owner's approval. Lock off and tag the isolation valve. Check for leaks with a gas detector before and during work, and ventilate the area.
9	Fill and purge air, check the relief valve, commission and set the temperature	Turn the system off and let it cool before work. Isolate and lock off the heat source and valves, and release the pressure. Check the temperature, and open fittings slowly while facing away.
10	Take the old unit off site and clean up	Lifting and carrying heavy loads: see step 1 for the full controls Order materials to size and send packaging back where you can. Put skips and waste chutes close to the work.

4. PPE AND PERMITS

Required PPE	Permits and plans
Safety boots Rigger gloves Safety glasses FFP3 dust mask Knee pads Safety helmet Face shield Coveralls Welding gauntlets Cut-resistant gloves	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					
Press fitting tool					
Propane gas torch					

Plant / equipment	Licence or training needed	Inspection needed	Rego / ID	Last inspected	Certificate / report
Trailer					

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