Risk assessment and method statement (RAMS) for heat pump engineers

Starting point: review and adapt it for your job. Part 1 is the risk assessment, with typical hazards for heat pump engineers filled in. Part 2 is the method statement.

Client asking for RAMS on every job? The Site Book writes them from a short description of the work. Your first job is free: **thesitebook.co.uk/features/rams**

Company name _____ **Client** _____

Job and site address _____ **Start date and expected duration** _____

Prepared by _____ **Date** _____

Principal contractor (if there is one) _____ **Date of next review** _____

Description of the work

Describe the work this RAMS covers, where it happens and anything about the site that affects how it is done.

Description of the work

Part 1: Risk assessment

List the hazards on this job. For each one, decide who might be harmed and how, how likely it is and how serious it could be.

Can you get rid of the hazard altogether? If not, control the risk so that harm is unlikely. Give collective protective measures priority over individual ones such as PPE.

Typical hazards for heat pump engineers, each with the key points from our toolbox talk on it. This is a starting point, not an assessment of your job. Mark which apply to this job, cross out any that do not, and add the hazards this job has that are not listed.

Hazard or topic	Key points and controls to consider	Applies to this job?	Notes for this job
Hot Works	• A written hot works permit must be issued before any hot work begins — no permit, no work • Clear all combustible materials within at least 10 metres of the hot work area, or protect them with fire-resistant sheeting • Ensure a dedicated fire watch is maintained during hot works and for at least 60 minutes after work finishes, then check the area again two hours after the work ended • Have suitable fire extinguishers (CO_2 and water) immediately available at the hot work location • Check the area below, above, and on the other side of walls or partitions — sparks travel through gaps, ducts, and service penetrations • Never carry out hot works in areas where flammable liquids, gases, or dusts are present without a full risk assessment and gas-free certification • Ensure smoke detection systems in the area are managed during hot works (notify fire alarm monitoring, do not simply isolate)		
Asbestos Awareness	• Asbestos was widely used in UK buildings constructed before 2000 — assume it may be present in any pre-2000 building • You CANNOT identify asbestos by looking at it — only laboratory analysis can confirm it • Common locations: insulation boards, ceiling tiles, floor tiles, pipe lagging, textured coatings (Artex), roof sheets, and soffits • If you suspect asbestos: STOP work immediately, keep people away, and report to your supervisor • Only licensed contractors may do licensable asbestos work — such as removing sprayed coatings or pipe lagging, and work on asbestos insulating board (AIB) that isn't short duration • The duty to manage asbestos applies to non-domestic premises and the common parts of multi-occupancy residential buildings. It does not apply inside individual domestic dwellings, including rented homes. Where asbestos is known or presumed to be present, the dutyholder must prepare and implement a written asbestos management plan and keep it under review. • Before intrusive refurbishment or demolition where asbestos may be present, ensure that a competent surveyor has completed an appropriate refurbishment or demolition survey covering the areas and materials affected by the planned work. A management survey alone is not sufficient for this purpose. • The domestic exception applies only to the premises duty to manage asbestos. Builders and other contractors must still identify and control asbestos risks before work that could disturb materials in a home.		

Hazard or topic	Key points and controls to consider	Applies to this job?	Notes for this job
Confined Spaces	• A confined space is any enclosed or substantially enclosed space where there is a foreseeable risk of serious injury from hazardous conditions — it is defined by risk, not just size • Never enter a confined space without a permit to work and a safe system of work • Atmospheric testing must be carried out before entry and continuously during work • A trained standby person must be stationed at the entry point at all times during work • Emergency rescue arrangements must be in place before anyone enters • Common hazards include toxic gas, oxygen depletion, oxygen enrichment, flammable atmospheres, flooding, and engulfment		
Manual Handling	• Avoid manual handling where reasonably practicable — use mechanical aids (trolleys, hoists, telehandlers) • Assess the load before lifting: weight, shape, grip points, and destination • For a basic lift, start with your back, hips and knees slightly bent, hold the load close, and lift smoothly without bending your back further or twisting • Plan the route — clear obstacles, check for trip hazards, and make sure doors are open • Get help or split the load if it is too heavy, awkward, or you cannot see over it • Repetitive handling is just as dangerous as heavy lifts — rotate tasks where possible		
Lone Working	• Carry out a specific risk assessment for lone working before the work begins — identify what could go wrong and how the lone worker will get help • Establish a check-in system — regular contact at agreed intervals with a supervisor or buddy • Ensure the lone worker has a reliable means of communication (mobile phone, two-way radio) and knows who to call • Identify tasks that must never be done alone (e.g. confined space entry, work at height, work near live services) • Ensure the lone worker is competent and experienced enough to handle foreseeable situations without supervision • Plan for medical emergencies — the lone worker should have access to first aid equipment and the site emergency procedures		
COSHH — Hazardous Substances	• COSHH requires employers to assess, control, and monitor exposure to hazardous substances • Always read the safety data sheet (SDS) before using any chemical product • Common construction hazards: cement (dermatitis, burns), solvents, resins, wood dust, welding fumes, diesel exhaust fumes • Use the hierarchy of controls: substitute with a less hazardous product, then engineer out the exposure, then use PPE as a last resort • Health surveillance may be required for workers regularly exposed to certain substances • COSHH assessments must be reviewed regularly and whenever the task or product changes		

Record each hazard that applies to this job in the table below, with the controls you will put in place.

Hazard	Who might be harmed and how	Controls in place	Further action needed	Who	When	Done

Part 2: Method statement

Sequence of work

List the steps in the order the work will be done, from setting up to clearing away. Put the controls for each step next to it.

Step	What will be done	Who	Plant, equipment and materials	Controls for this step
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

People and competence

List who will do the work. Each person needs the skills, knowledge, training and experience for their tasks, or must be in the process of getting them.

Name	Role or trade	Relevant training, qualifications or cards

Personal protective equipment (PPE)

PPE	Needed for which steps

Emergencies

Record the arrangements for any foreseeable emergency, including how to evacuate the site.

First aider _____ **First aid kit location** _____

Nearest A&E (name and address) _____ **Assembly point** _____

How to raise the alarm _____ **Site contact and phone number** _____

If there is serious and imminent danger, workers should stop work immediately, report it and go to a place of safety.

Who workers report danger to _____

Briefing record

Brief everyone doing the work on this RAMS before the work begins. Each person signs to confirm.

Name	Company	Signature	Date

Approval

	Name	Signature	Date
Prepared by			
Approved by			

Based on: HSE's five steps to managing risk; the Management of Health and Safety at Work Regulations 1999, regulation 3 and Schedule 1; CDM 2015, regulations 15 and 30; HSE guidance L153. The typical hazards and key points are from The Site Book's toolbox talks on each topic, at thesitebook.co.uk/toolbox-talks.

- HSE, Managing risks and risk assessment at work: steps needed to manage risk: https://www.hse.gov.uk/simple-health-safety/risk/steps-needed-to-manage-risk.htm
- Management of Health and Safety at Work Regulations 1999, regulation 3: https://www.legislation.gov.uk/uksi/1999/3242/regulation/3
- Management of Health and Safety at Work Regulations 1999, Schedule 1: https://www.legislation.gov.uk/uksi/1999/3242/schedule/1
- CDM 2015, regulation 15: https://www.legislation.gov.uk/uksi/2015/51/regulation/15
- CDM 2015, regulation 30: https://www.legislation.gov.uk/uksi/2015/51/regulation/30
- HSE, Managing health and safety in construction (L153): https://www.hse.gov.uk/pubns/books/l153.htm

Starting-point template from The Site Book, October 2026. Review and adapt it for the actual job and site before anyone works to it.