

UNDERFLOOR HEATING INSTALLATION

ACTIVITY RAMS — ADAPT TO SITE BEFORE USE

Pipe laying and manifolds · the screed interface · pressure test before cover

KD-RAMS-ME-011 Rev A0

Statutory basis: HSWA 1974 s.2(2)(a) and MHSWR 1999 regs 3 and 5 (this document is the recorded safe system of work); PUWER 1998; Manual Handling Operations Regulations 1992; Work at Height Regulations 2005; COSHH 2002; CDM 2015 regs 13 and 15. Activity-specific law is cited on the documents it applies to: Gas Safety (Installation and Use) Regulations 1998, the Fluorinated Greenhouse Gases Regulations 2015 for refrigerant handling, and ACOP L8 (4th edition, 2013) for water systems.

1 DOCUMENT AND PROJECT IDENTIFICATION

RAMS REFERENCE	PROJECT / SITE REF	SITE NAME AND ADDRESS	DATE PREPARED	NEXT REVIEW DATE
CLIENT / PRINCIPAL CONTRACTOR	PLANNED START	DURATION	OPERATIVES	SUPERVISING THE WORK

2 SCOPE OF WORKS

Installation of wet underfloor heating: manifolds, pipe laying and clipping to the floor build-up, pressure testing, and the interface with the screeding contractor.

This document does not cover: the heating design and flow calculations, the screed itself (KD-RAMS-AF-003), and boiler or heat pump connection.

SITE-SPECIFIC SCOPE, LOCATIONS AND LIMITATIONS

3 RISK ASSESSMENT — SCORE EACH RISK FOR THIS SITE, THEN ADD WHAT IS MISSING

The hazards and controls below are the starting point for this activity, written by a working main contractor. They are not complete for your site until a competent person has scored each risk, added the site-specific hazards, and struck out anything that does not apply. Rate risks High / Medium / Low before and after controls.

1. Underfloor pipework damaged or depressurised before the screed goes down

At risk: The building owner, the following trades

Controls: The circuit is pressure tested and LEFT UNDER PRESSURE through the screeding operation, with the gauge visible and the hand-over recorded in writing — a leak found after the screed has set is a floor that comes back up. No joints are laid below the screed line. The screeding contractor is briefed on the pipe positions before a barrow goes onto the floor.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

2. Manual handling of boards, materials and components

At risk: Operatives

Controls: Mechanical aids first — trolleys, board lifters, hoists. Two-person lifts for boards and long components; order materials in manageable sizes; plan storage close to the workface; keep carrying routes clear and lit.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

3. Skin contact with cements, plasters, adhesives and sealants

At risk: Operatives

Controls: COSHH assessments for every substance; gloves matched to the substance; barrier and after-work creams available; washing facilities close to the work; report skin problems early — dermatitis is a reportable trend, not a private nuisance.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

4. Slips, trips and housekeeping

At risk: Everyone in the work area

Controls: Keep the workface clear, remove waste and offcuts as they are created, route leads at high level or under mats, and maintain task lighting.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

5. Striking hidden services when drilling, cutting or fixing

At risk: Operatives

Controls: Check drawings and the services register, scan with a CAT before drilling or chasing into existing fabric, respect safe zones, and stop and reassess if an unrecorded service is found.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

6. Interface with occupants, other trades and the public

At risk: Occupants, other trades, the public

Controls: Segregate the work area — barriers, signage, sheeting; agree access routes and working hours with the occupier; never obstruct escape routes; deliveries and waste runs outside peak movement times where agreed.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

7. Working all day on hands and knees on a hard floor

At risk: Operatives

Controls: Pipe laying is sustained kneeling work and it causes lasting knee damage. Knee protection is worn and the task is rotated between the gang rather than one person laying a whole plot. Materials are staged so nobody crawls repeatedly to a stack at the far end.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

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Site-specific hazards not listed above — every site has at least one:

HAZARD	WHO IS AT RISK	CONTROLS	INITIAL HI/...	RESIDUAL...	ACTION OWNER	BY WHEN

4 METHOD — SEQUENCE OF WORK

- 01 Confirm the design layout, pipe centres and the floor build-up before laying anything.
- 02 Install manifolds at the designed positions with access maintained for balancing.
- 03 Lay insulation and clip rails or mesh; keep the route to the manifold clear.
- 04 Lay pipe to the design centres with no joints below the screed line — a buried joint is a future failure.
- 05 Pressure test to the specification and LEAVE THE SYSTEM UNDER PRESSURE while the screed is laid.
- 06 Hand over to the screeder in writing with the test pressure recorded and the pressure gauge visible.
- 07 Re-test after screeding and record; report any pressure drop before the floor is covered.

SITE-SPECIFIC AMENDMENTS TO THE SEQUENCE

5 PLANT, EQUIPMENT AND MATERIALS

Pipe uncoilers and clipping tools
Pressure test pump and gauge

Knee protection

INSPECTION / THOROUGH EXAMINATION REFS

COSHH ASSESSMENT REFS

6 PPE — THE LAST LINE OF CONTROL, NOT THE FIRST

Head protection
Safety footwear
High visibility

Gloves — task-rated
Eye protection
Hearing protection

Knee pads — sustained kneeling work
Gloves for pipe handling

RPE TYPE, FACE-FIT STATUS, AND ANY OTHER PPE REQUIRED

7 PERMITS REQUIRED BEFORE THIS WORK STARTS

A permit authorises this work in that place, on that day. It extends the safe system of work in this document — it does not replace it (HSE HSG250). The site issues the permit; record its number before work starts.

KD-PTW-PE-009 — Permit to Enter
For occupied and phased dwellings.

PERMIT NUMBER

8 EMERGENCY ARRANGEMENTS — COMPLETE FOR THIS SITE

FIRST AIDER AND LOCATION

NEAREST A&E

ASSEMBLY POINT

HOW THE ALARM IS RAISED

EMERGENCY ACCESS FOR THIS WORK AREA

SPILL / ENVIRONMENTAL RESPONSE

9 BRIEFING RECORD — EVERYONE WORKING UNDER THIS RAMS SIGNS BEFORE STARTING

By signing you confirm the contents of this RAMS have been explained to you, you understand the hazards and controls, and you will work to the sequence stated. Tell the supervisor if the work or the site does not match this document — work stops until it does.

NAME	COMPANY	SIGNATURE	DATE

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NAME	COMPANY	SIGNATURE	DATE

10 PREPARED AND ACCEPTED

Prepared / adapted for this site by — I confirm I have adapted this document to the site, scored the risks, and that it describes how the work will actually be done.

PRINTED NAME	ROLE / COMPETENCE	COMPANY	SIGNATURE	DATE	TIME

Accepted for the site by — principal contractor or site manager review.

PRINTED NAME	ROLE	COMPANY	SIGNATURE	DATE	TIME

Review this RAMS if the work, the site or the law changes, and at least before each new phase of the works. Flatten the completed PDF before filing so the record cannot be silently edited.

R REVISION HISTORY

Every revision of this document, and every review that found nothing to change. The revision on the front of this sheet is the one you are holding — check kubitdocs.com for the current one before use.

Rev	Date	Class	What changed	Authorised by
D0	2026-08-11	first-issue	First issue.	— not yet approved —
A0	2026-08-27	review	Approved for issue by the author. Content unchanged from D0; the draft status strip is removed. No independent third-party review has been carried out.	Author — director, UK principal contractor, SMSTS. Not an independent review.

Class: first-issue · material (the law, a control, a field or the scope changed — past buyers are notified) · editorial (wording or layout only) · review (checked, nothing changed) · withdrawal. Revision prefix D = draft, not approved and not for sale; A = approved for issue by the person named, on the date shown.