

THERMAL PROTECTION OF POURS

ACTIVITY RAMS — ADAPT TO SITE BEFORE USE

Insulation blankets · sheeted enclosures · fuel-fired heaters · cold weather and large pours

KD-RA-CN-002 Rev A0

Statutory basis: COSHH 2002 for carbon monoxide and heater exhaust, against the workplace exposure limits in EH40/2005 (4th edition, 2020); DSEAR 2002 for LPG and heater fuels; the Work at Height Regulations 2005 for blanket and enclosure work at slab edges and openings. This document is the recorded safe system of work required by HSWA 1974 s.2(2)(a) and MHSWR 1999 regs 3 and 5.

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

Protecting fresh concrete from cold, and controlling temperature in large pours, as the specification requires: laying and removing insulation blankets, erecting sheeted enclosures over pours, running fuel-fired or electric heaters, reading the temperature probes the specification calls for, and the out-of-hours checks.

This document does not cover: the thermal control specification and the striking criteria (the designer's), placing the concrete (KD-RAMS-CF-001), power floating and curing agents (KD-RAMS-CF-004), and scaffold-supported temporary roofs.

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. Carbon monoxide and exhaust fumes from fuel-fired heaters inside enclosures

At risk: Operatives entering enclosures, others nearby

Controls: Heaters stand outside the enclosure and duct warm air in wherever the heater allows it. Where one must stand inside, the enclosure is ventilated as the heater manufacturer states, a carbon monoxide alarm is fitted, and nobody works or rests inside while it runs. Headache, dizziness or nausea in an enclosure means everyone out, heater off, ventilate — and report it.

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

2. Fire — heaters against sheeting, blankets and timber formwork; refuelling

At risk: Everyone on the deck and below

Controls: Heaters kept at the clearances the manufacturer states from sheeting, blankets, formwork and stored materials, on a level base where they cannot be knocked over; flame-retardant sheeting where specified; an extinguisher at each enclosure; heaters switched off before sheeting is moved. Refuelling cold where the manufacturer requires it, outside the enclosure, over a drip tray.

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

3. LPG cylinders — leaks, damaged hoses and storage

At risk: Operatives, the site

Controls: Cylinders upright and secured, stored outside in a ventilated cage away from basements, drains, excavations and ignition sources; regulator and hose checked before connection and leak-tested with leak detection fluid, never a flame; no spare cylinders in an enclosure; valves closed at the end of use.

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

4. Blankets, frames and sheeting caught by wind

At risk: Operatives on the deck, people below and beyond the edge

Controls: Frames and sheeting fixed as the supplier's instructions or the temporary works design state, tied down as each sheet goes on, never handled loose at an edge; frames fixed to formwork or edge protection only where that design allows the load. The area below slab edges is kept clear while blankets and sheeting are handled; sheeting work stops when wind makes it uncontrollable.

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

5. Falls at slab edges, and into openings hidden under blankets

At risk: Operatives

Controls: Edge protection stays in place — it is not taken down to pull blankets over the edge. Openings are covered, fixed and marked before blankets are laid, because a blanket hides them. Blankets are rolled out working away from edges, never walking backwards.

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

6. Lone out-of-hours checks, slips on frost, heavy wet blankets

At risk: Operatives

Controls: Anyone carrying out checks alone out of hours has an agreed check-in with a named person and a route that is lit and gritted. Wet blankets are much heavier than dry ones — rolled and moved by two people or by machine, and stored on the deck only where the loading is allowed.

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

THERMAL PROTECTION OF POURS

continued

ACTIVITY RAMS — ADAPT TO SITE BEFORE USE

KD-RA-CN-002 Rev A0

7. Electric heaters, heating mats and probe leads

At risk: Operatives

Controls: Supplied from the site's temporary installation with its protection, reduced low voltage wherever the equipment allows; leads inspected before use, kept off the wet slab where possible and away from standing water; probe leads routed so they are not a trip or snag at an edge.

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

8. Cement burns while fixing probes in fresh concrete

At risk: Operatives

Controls: Probes placed from boards as the concrete is placed; waterproof gloves with cuffs; no kneeling in fresh concrete; splashes washed off at once.

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

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 Read the specification's cold-weather or thermal control requirement: blankets, enclosure, heating, probe positions, reading frequency and the criteria for removing protection.
- 02 Plan the protection before the pour: heater type and position, fuel storage, enclosure frame and fixings, ventilation, fire equipment, who carries out the out-of-hours checks and their check-in arrangement.
- 03 Check heaters, hoses, regulators, leads and carbon monoxide alarms before use; quarantine anything damaged.
- 04 Fix probes at the specified positions as the concrete is placed, working from boards.
- 05 Cover and mark openings, then lay blankets from the finished areas outwards as soon as the surface can take them; edge protection stays in place; keep the area below edges clear.
- 06 Erect enclosure frames and sheeting to the supplier's or temporary works method, tying down as each sheet goes on; stop when wind makes sheeting uncontrollable.
- 07 Start heaters outside the enclosure where possible; confirm ventilation and the carbon monoxide alarm. Nobody inside while a fuel-fired heater runs within it.
- 08 Carry out and record the planned checks through the protection period, out of hours included — heaters, fuel, sheeting, alarms, probe readings — with lone checkers keeping to the agreed check-in.
- 09 STOP and withdraw on a carbon monoxide alarm, symptoms, fire, sheeting breaking loose or a heater fault; switch off and ventilate before anyone goes back in.
- 10 Remove protection only when the specified criteria are met: heaters off and cooled first, sheeting taken down in stages, blankets rolled and stored.

SITE-SPECIFIC AMENDMENTS TO THE SEQUENCE

5 PLANT, EQUIPMENT AND MATERIALS

Insulation blankets	Carbon monoxide alarms
Enclosure frames and sheeting — flame-retardant where specified	Temperature probes and logger
Indirect-fired or electric heaters	Fire extinguishers
Caged LPG storage and banded fuel containers	

INSPECTION / THOROUGH EXAMINATION REFS

COSHH ASSESSMENT REFS

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

Head protection	Gloves — task-rated	Waterproof gloves when fixing probes
Safety footwear	Eye protection	
High visibility	Hearing protection	

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

THERMAL PROTECTION OF POURS

continued

ACTIVITY RAMS — ADAPT TO SITE BEFORE USE

KD-RA-CN-002 Rev A0

7 PERMITS REQUIRED BEFORE THIS WORK STARTS

No permit is normally required for this activity. The site's own rules may still require one — check before starting, and record any permit issued below.
PERMITS ISSUED FOR THIS WORK (OR NONE)

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

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	2026-09-11	first-issue	First issue.	— not yet approved —
A0	2026-09-11	review	Approved for issue by the author. Content unchanged from the reviewed draft; 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.