

CONCRETE SAMPLING AND CUBE MAKING

ACTIVITY RAMS — ADAPT TO SITE BEFORE USE

Fresh concrete at the mixer chute · slump and temperature · making, carrying and curing cubes

KD-RA-CN-005 Rev A0

Statutory basis: COSHH 2002 — wet concrete is corrosive and a potent sensitiser, and mould release agents need their own assessment; Manual Handling Operations Regulations 1992 for filled moulds and sample buckets; PUWER 1998 for the vibrating table and curing tank. This document is the recorded safe system of work required by HSWA 1974 s.2(2)(a) and MHSWR 1999 regs 3 and 5. Test methods referred to (standards, not law): slump to BS EN 12350-2:2019; making and curing specimens to BS EN 12390-2:2019.

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

Sampling fresh concrete for acceptance testing during a pour: taking the sample at the truck mixer, slump and temperature tests, making cube specimens, storing them on site overnight, and moving them to the curing tank or the laboratory's collection.

This document does not cover: placing the concrete (KD-RAMS-CF-001), laboratory crushing and the acceptance decision (the laboratory's and the designer's), coring hardened concrete (KD-RAMS-CR-001), and any decision to load or strike on early-age results (the KD-PTW-TL-022 process).

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. Struck or crushed by reversing truck mixers while sampling

At risk: Sampler

Controls: Sampling point agreed before the pour, out of the mixer's reversing path; the sampler approaches only when the mixer has stopped, the driver knows the sampler is there and the banksman has confirmed it; never between a mixer and the pump hopper, a wall or another vehicle.

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

2. Taking the sample at the chute — rotating drum, chute swing and discharge

At risk: Sampler

Controls: Sample taken only once the driver has a steady discharge under control; the sampler stands to the side of the chute, not in front of it, hands clear of the chute pivot and hopper; a scoop or bucket used — never a hand in the flow.

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

3. Cement burns and dermatitis from wet concrete; mould release agent on skin

At risk: Sampler

Controls: Wet concrete is corrosive: waterproof gloves with cuffs, sleeves down, eye protection when rodding and tamping; splashes washed off at once; clean water and eyewash at the testing station; contaminated clothing changed. Release agent brushed on thinly wearing gloves, under its own COSHH 2002 assessment.

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

4. Manual handling of filled cube moulds and sample buckets

At risk: Sampler, anyone moving cubes

Controls: Filled moulds are heavy for their size: carried one at a time or moved on a trolley, never stacked in the arms; the testing station set up at bench height close to the sampling point so filled moulds are not carried across site; buckets part-filled for carrying.

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

5. Compacting cubes — vibrating table, trapped fingers, noise

At risk: Sampler

Controls: Compaction by tamping rod or vibrating table; the table used with its guards in place and hands clear of the clamps while it runs; hearing protection where the table is noisy.

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

6. Curing tank heaters and electricity near water

At risk: Sampler, site staff

Controls: Tank supplied from the site's temporary installation with RCD protection, lead off the ground and away from water, inspected before use; the tank switched off and unplugged before hands go into the water.

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

7. Working on or beside the live pour

At risk: Sampler

Controls: Samples taken at ground level at the mixer, not on the deck; where a sample must come from the pump discharge, the sampler follows the placing hand's direction and stays out of the end-hose swing.

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

8. Slips, trips and lone working at the testing station

At risk: Sampler

Controls: Testing station on firm level ground, lit, and away from traffic routes; washings and spilt concrete cleared as work goes on; a sampler working alone on a late pour has an agreed check-in with the supervisor.

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 H/...	RESIDUAL...	ACTION OWNER	BY WHEN

4 METHOD — SEQUENCE OF WORK

- Confirm the testing schedule: which loads to sample, the tests, the number of cubes and who collects them.
- Set up the testing station before the first delivery: level base, cleaned and oiled moulds, water, eyewash, trolley, curing tank or insulated storage, and lighting for a late pour.
- Agree the sampling point with the banksman and drivers, clear of reversing paths and the pump hopper.
- Check the delivery ticket against the order; report a wrong mix rather than sampling it.
- Take the sample once the mixer has stopped manoeuvring and discharge is steady, standing to the side of the chute.
- Carry out the slump test to BS EN 12350-2:2019 and the temperature check; record both with the ticket details.
- Fill and compact cubes to BS EN 12390-2:2019 by rod or vibrating table; mark each cube; keep hands clear of clamps.
- Cover the cubes and store them where they will not be disturbed, frozen or overheated, as the standard requires.
- Demould at the time the standard allows and transfer to the curing tank or the laboratory's collection; switch the tank off before reaching into it.
- Clean moulds and equipment at the washout, never into drains; wash and change contaminated clothing before leaving.

SITE-SPECIFIC AMENDMENTS TO THE SEQUENCE**5 PLANT, EQUIPMENT AND MATERIALS**

- | | |
|--|---------------------------------------|
| Sampling scoop and bucket | Thermometer |
| Slump cone, base plate, tamping rod and rule | Trolley for filled moulds |
| Cube moulds and release agent | Curing tank with RCD-protected supply |
| Vibrating table where used | Eyewash and clean water |

INSPECTION / THOROUGH EXAMINATION REFS**COSHH ASSESSMENT REFS****6 PPE — THE LAST LINE OF CONTROL, NOT THE FIRST**

- | | | |
|-----------------|---------------------|------------------------------|
| Head protection | Gloves — task-rated | Waterproof gloves with cuffs |
| Safety footwear | Eye protection | |
| High visibility | Hearing protection | |

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

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continued

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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.