

CONCRETE CUTTING AND DRILLING

Diamond drilling · floor and wall sawing · slurry and silica

ACTIVITY RAMS — ADAPT TO SITE BEFORE USE

KD-RAMS-CR-001 Rev A0

Statutory basis: HSWA 1974 s.2(2)(a) and MHSWR 1999 regs 3 and 5; COSHH 2002 with EH40/2005 (4th edition, 2020) — concrete cutting is a high silica-exposure activity and dry cutting is not a method under this document; CAR 2012, because existing structures and their coatings are presumed to contain asbestos until the register says otherwise; PUWER 1998 and LOLER 1998 reg 8 for the saws and for rigging cut sections; Electricity at Work Regulations 1989 for services within the structure; Work at Height Regulations 2005; Manual Handling Operations Regulations 1992; CDM 2015 regs 13 and 15. Cutting an opening removes structure: the propping and the sequence are temporary works under BS 5975-1:2024, designed before the first cut and never decided at the workplace.

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

Diamond drilling, floor sawing, wall sawing and wire sawing of concrete and masonry: forming openings, penetrations and cut lines, including rigging and removal of cut sections.

This document does not cover: DRY cutting of concrete in any circumstance, cutting into post-tensioned elements without written engineer confirmation, and the temporary works design.

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. Removing structure without the propping the design requires

At risk: Everyone in and around the building

Controls: No structural cut starts until the temporary works design is on site, the propping is installed to it, and the temporary works co-ordinator has signed the permit to cut. The cutting sequence in the design is followed exactly — an opening is not enlarged, and a second opening is not started, without going back to the designer.

Props are not moved, slackened or removed to suit access at any point.

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

2. A fully cut section falling or swinging

At risk: Cutting crew, anyone below

Controls: Every section is rigged and taken on load BEFORE the final cut is completed, never after — a cut section is loose, is heavier than it looks, and is held by nothing. The lift is planned with its weight calculated, not estimated. The area below and beyond is barriered and cleared for the full drop and swing path, and nobody works under a section at any stage of the cut.

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

3. Cutting or drilling into services buried in the slab or wall

At risk: Operatives, the building

Controls: Every position is scanned by a trained operative with a suitable scanner and the results marked up, then cross-checked against the as-built drawings — the two must agree or the position is not cut. Electrical supplies in the zone are isolated, locked off and proved dead where the scan or the drawings show anything live. Post-tensioned slabs are treated as no-go until the tendon layout is confirmed by the engineer in writing.

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

4. Slurry from wet cutting spreading and getting into drains and floors below

At risk: Operatives, the building, the environment

Controls: Slurry is contained at the cut with bunding and vacuumed as it is generated — it is never allowed to run. Penetrations are sealed on the underside before the cut so nothing runs into the floor below. No slurry to any drain, ever; it is collected, allowed to settle and removed under the site waste procedure. Wet floors are signed and cleaned as work proceeds.

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

5. Respirable silica and general dust from cutting and drilling

At risk: Operatives, others in the area

Controls: On-tool extraction (M-class) or wet suppression; RPE to the COSHH assessment (FFP3, face-fit tested) where extraction cannot adequately control exposure; sheet and segregate the work area in occupied buildings.

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

6. Disturbing asbestos-containing materials in existing buildings

At risk: Operatives, building occupants

Controls: Check the asbestos register before any intrusive work (CAR 2012). No register, or unclear entries, means stop and refer. If suspect material is found: STOP, withdraw, secure the area and report it — the discovery procedure applies before any further work.

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

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7. Noise from cutting, fixing and plant

At risk: Operatives, others in the area

Controls: Select quieter methods and tools where practicable; hearing protection in designated zones and for noisy operations; agree noisy-works windows with the occupier in occupied buildings.

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

8. Hand-arm vibration from power tools

At risk: Operatives

Controls: Select low-vibration tools, keep cutting edges sharp, rotate operatives to keep exposure below the action value, and record trigger time where the assessment requires it.

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

- 01 Confirm the temporary works design and propping are complete and the permit to cut is signed.
- 02 Check the asbestos register for the element and its coatings before any cutting.
- 03 Scan every position and cross-check against as-built drawings; isolate and prove dead any services in the zone.
- 04 Seal penetrations on the underside and set up slurry containment and vacuum extraction.
- 05 Barrier the area below and beyond for the full drop and swing path of any section.
- 06 Rig the section and take it on load BEFORE completing the final cut.
- 07 Remove sections under lifting control, clear slurry continuously, and hand back the opening protected and edge-guarded.

SITE-SPECIFIC AMENDMENTS TO THE SEQUENCE

5 PLANT, EQUIPMENT AND MATERIALS

- Diamond drill rigs, floor and wall saws with water feed
- Slurry vacuum and bunding
- Rebar and services scanner
- Lifting accessories with current certificates
- Lock-off kit

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
- Hearing protection to the assessed level
- Anti-vibration gloves
- Eye and face protection

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-GP-003 — General Permit to Work

For the permit to cut, countersigned by the temporary works co-ordinator.

PERMIT NUMBER

KD-PTW-LO-008 — Lifting Operations Permit

For rigging and removing cut sections.

PERMIT NUMBER

KD-PTW-EL-010 — Electrical Permit to Work

For isolation where services are in the cutting zone.

PERMIT NUMBER

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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	2026-08-11	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.