

ON-SITE WELDING AND HOT CUTTING OF STEEL

ACTIVITY RAMS — ADAPT TO SITE BEFORE USE

Site welding · burning · grinding — under hot works control

KD-RAMS-ST-003 Rev A0

Statutory basis: HSWA 1974 s.2(2)(a) and MHSWR 1999 regs 3 and 5; Work at Height Regulations 2005; LOLER 1998 reg 8 with BS 7121-1:2016 for the lifting; erection stability per the engineer's scheme and BS 5975-1:2024 principles; PUWER 1998; COSHH 2002 for welding fume, coatings and solvents; CDM 2015 regs 13 and 15. Hot works under the permit system.

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

Site welding, hot cutting and grinding of structural steel and metalwork, at ground and at height, always under the site's hot works permit system.

This document does not cover: welding procedure qualification (the fabricator's), and work without a hot works permit where one operates.

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. Work at height from steps, podiums, towers or MEWPs

At risk: Operatives, and anyone below

Controls: Select access by the Work at Height hierarchy — podium or tower before steps; MEWPs by trained (IPAF) operators only. Inspect access equipment before use, establish an exclusion below overhead work, and secure tools and materials against dropping.

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

2. 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

3. 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

4. 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 workplace; 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

5. Fire compartment breaches from unstopped penetrations and openings

At risk: Building occupants

Controls: Fire-stop penetrations as the work proceeds in line with the fire-stopping plan; never leave a compartment breach open overnight in an occupied building; record what was stopped, where and with what.

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

6. Fire from sparks, slag and preheat — during and after work

At risk: Everyone in the building

Controls: Hot works permit before work; combustibles cleared or protected; mats and screens to contain sparks — especially falling sparks from height; extinguisher at the position; fire watch through and after per the certificate.

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

7. Welding fume — a carcinogen

At risk: Welders, those nearby

Controls: HSE requires control of ALL welding fume: LEV/on-torch extraction where practicable, RPE (face-fit tested) where extraction is not sufficient — including outdoors; position out of the plume; screens protect others from arc eye.

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

8. Arc eye and burns to passers-by

At risk: Other trades, public

Controls: Screens around arc work; signage; leathers and screens for the welder; hot metal marked or cooled before leaving.

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 Obtain the hot works permit; set fire protection and the watch before striking an arc.
- 02 Set extraction/RPE per the fume assessment; screen the arc.
- 03 Weld/cut/grind to the specification; control sparks at height with mats below.
- 04 Close down: isolate sets, cool and check the area, complete the fire watch and certificate.

SITE-SPECIFIC AMENDMENTS TO THE SEQUENCE

5 PLANT, EQUIPMENT AND MATERIALS

Welding sets (inspected)

LEV / on-torch extraction

Screens and mats

Extinguishers

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

Welding PPE — helmet, leathers, gauntlets

RPE per fume assessment

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-HW-001 — Hot Works Permit

Before any arc, flame or grinding work.

PERMIT NUMBER

KD-PTW-FW-002 — Fire Watch Certificate

Completes every hot works permit.

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

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	2026-08-09	first-issue	First issue.	— not yet approved —
D1	2026-08-10	material	BS 5975 recited to the 2024 parts; COSHH 2002 added for welding fume, coatings and solvents. Legislation position reviewed against Product Legislation Register KD-REG-01 Rev R01.3 and the August 2026 horizon scan; cutoff moved to 10 August 2026.	— not yet approved —
A0	2026-08-27	review	Approved for issue by the author. Content unchanged from D1; 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.