

Statutory basis: DSEAR 2002 for the highly flammable methyl methacrylate vapour — assessing where the vapour will travel and controlling ignition sources throughout that area. COSHH 2002 regs 6, 7 and 12 with HSE ACOP L5 (6th edition, 2013) for the resin, an irritant and skin sensitiser, and for the peroxide initiator; workplace exposure limits in EH40/2005 Workplace exposure limits (4th edition, 2020). HSWA 1974 s.3 for occupants of the building. Unreacted resin, initiator and contaminated materials under the Hazardous Waste (England and Wales) Regulations 2005 — an England and Wales instrument; Scotland and Northern Ireland have their own rules, so confirm them for the site. CDM 2015 regs 13 and 15. 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

Application of methyl methacrylate (MMA) resin floor systems — primers, body coats, broadcast and seal coats — in new and occupied buildings: assessing where the vapour will travel, isolating ignition sources and air-handling, sealing the area, storing and mixing the resin and peroxide initiator, application, surplus and waste, and re-occupation.

This document does not cover: the wider resin floor application, including substrate preparation and epoxy and polyurethane systems (KD-RAMS-FL-003, KD-RAMS-RN-003); substrate moisture testing (KD-RA-FO-005).

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. Fire or explosion — flammable MMA vapour reaching an ignition source

At risk: Applicators, occupants, the building

Controls: MMA resin is highly flammable and its vapour is heavier than air, so it spreads along floors and into pits, ducts, drains, lift shafts and service voids. The DSEAR assessment maps where the vapour can reach, not just the room being laid. Every ignition source in that area — pilot lights, gas appliances, heaters, fridges and other electrical equipment, and hot work nearby — is identified and isolated with the building manager before the resin is opened. No smoking. Only equipment the assessment allows is used in the area.

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

2. Odour and vapour travelling through an occupied building

At risk: Occupants, patients, staff, food and stock

Controls: MMA can be smelt at very low concentrations and reaches areas well away from the work. Air-handling that recirculates or draws from the work area is shut down or isolated with the building manager; doors, hatches, risers and floor drains are sealed; extraction discharges outdoors away from air intakes, windows and occupied areas. In food premises, food and packaging are removed from the vapour path because the odour taints them. Work in occupied premises is programmed out of hours by agreement.

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

3. Breathing resin vapour

At risk: Applicators

Controls: Vapour causes headaches, dizziness, nausea and eye and airway irritation. Extraction proven before the resin is opened; minimum quantity open; RPE with organic vapour filters as the COSHH assessment selects. Anyone affected goes to fresh air and does not return until the cause is found.

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

4. Skin sensitisation from MMA resin

At risk: Applicators

Controls: MMA is a skin sensitiser and passes through many common disposable gloves quickly. Glove material and change interval from the safety data sheet; no skin contact; resin washed off with soap and water at once, never solvent.

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

5. Peroxide initiator — fire and violent reaction

At risk: Applicators, the building

Controls: The initiator is an organic peroxide: kept in its original container, cool, apart from resin, solvents and combustible waste, with only the batch quantity at the mixing point. Never mixed directly with any accelerator additive; spills cleaned up as the safety data sheet directs, not swept into general waste.

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

6. Heat from surplus mixed resin curing in a container*At risk: Applicators, the building*

Controls: A mass of mixed resin in a bucket or bin can overheat, smoke and ignite. Only what can be laid within the working time is mixed; surplus is spread thin on a non-combustible surface in a ventilated place to cure, never tipped into a skip or bag while reacting.

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

7. Unreacted resin, initiator and contaminated waste*At risk: Waste handlers, the environment*

Controls: Unused resin and initiator are returned to their stores in the original containers or consigned as hazardous waste in separate labelled containers — never together. Contaminated rags, gloves and tins go into lidded metal bins removed from the building at the end of the shift. Nothing is poured into drains, which also carry vapour through the building.

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

8. Out-of-hours working in a closed building*At risk: Applicators*

Controls: Night and weekend installs authorised by the site; at least two people present during mixing and application; emergency arrangements and escape routes confirmed with the building manager each shift.

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

9. Re-occupation before the vapour has cleared*At risk: Occupants*

Controls: Every space the vapour reached is ventilated until the odour has cleared before air-handling, ignition sources and occupants return; handover to the building manager in person, time recorded.

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 specified MMA system and have the safety data sheets for resin, initiator and cleaner on site; complete the DSEAR and COSHH assessments for this building.
- 02 Walk the vapour path with the building manager — the room, adjoining spaces, drains, ducts, risers and voids — and list every ignition source and air-handling unit in it.
- 03 Agree the programme, working hours, areas to be vacated, food and stock to be removed, and the out-of-hours authorisation.
- 04 Isolate the listed ignition sources and air-handling; seal doors, hatches, risers and floor drains; set up extraction discharging outdoors away from intakes.
- 05 Confirm substrate preparation is complete (KD-RAMS-FL-003) and conditions are within the data sheet limits.
- 06 Set up the mixing point in a ventilated position with resin, initiator and waste stored apart; bring only the batch quantity of initiator to it.
- 07 Put on the RPE, gloves and eye protection the assessments select before opening the resin.
- 08 Mix each batch as the data sheet directs, initiator into resin, and lay, broadcast and seal within the working time, working towards the exit.
- 09 Spread any surplus thin on a non-combustible surface in a ventilated place to cure.
- 10 Stop, withdraw and ventilate if an ignition source is found in the vapour path, extraction fails, odour is reported in occupied areas, anyone feels unwell, or initiator is spilt.
- 11 Ventilate until the odour has cleared from every space it reached; restore air-handling and ignition sources; hand back to the building manager, record the time, and remove waste in the lidded metal bins.

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

- Extraction fans and ducting to outside, suitable for the DSEAR assessment
- Mixing drill suitable for the DSEAR assessment
- Rollers, squeegees and trowels
- Sheet and tape for sealing doors, risers and drains
- Lidded metal waste bins
- Fire extinguisher at the mixing point
- No-entry and no-smoking signs

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
- ☐ RPE with organic vapour filters as assessed — face-fit tested
- ☐ Gloves to the data sheet for MMA
- ☐ Disposable coveralls
- ☐ Spiked overshoes

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 isolation of ignition sources and air-handling in the building.

PERMIT NUMBER

KD-PTW-OO-033 — Out-of-Hours and Lone Working Authorisation

For night and weekend installations.

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	2026-09-11	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.