

Statutory basis: COSHH 2002 — cement and hydrated lime are substances hazardous to health, so exposure is assessed and prevented or adequately controlled under regs 6 and 7, against the workplace exposure limits in EH40/2005 (4th edition, 2020), with health surveillance under reg 11 where regular skin contact makes dermatitis likely; Personal Protective Equipment at Work Regulations 1992 regs 4 and 10 for the gloves, goggles and RPE; PUWER 1998 regs 4, 5 and 6 for mixers; Manual Handling Operations Regulations 1992 reg 4 for bags and tubs — the law sets no weight limit; RIDDOR 2013 reg 8 — diagnosed occupational dermatitis is reportable; CDM 2015 regs 13 and 15, with washing facilities under Schedule 2. 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

Batching and mixing mortar on site from bagged cement, hydrated lime, sand and admixtures by drum mixer, forced-action mixer or from a silo, and handling wet mortar through laying and pointing: the dust from opening and tipping bags, the alkaline burns and allergic dermatitis that wet cement causes, admixture handling, eye splashes, and the mixer itself.

This document does not cover: the laying itself (KD-RAMS-BM-001), silica from cutting bricks and blocks (KD-RAMS-BM-001 and KD-RAMS-BM-003), acid-based brick and masonry cleaners (KD-RA-LG-004), silo delivery, erection, standing and pneumatic filling (the silo supplier's work under its own documents), and hot-mixed quicklime or lime putty for heritage work (its own COSHH assessment).

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. Alkaline burns from wet cement and mortar — kneeling in it, or mortar trapped inside gloves, boots and clothing

At risk: Bricklayers, labourers

Controls: Wet mortar burns without pain at first, so the damage is done before anyone notices. Nobody kneels in wet mortar; waterproof gauntlets with the cuffs turned back and trousers worn over boot tops so mortar cannot collect inside; mortar that soaks through clothing is removed and the skin washed with clean water straight away, not at the next break; a burn is seen by a first-aider and referred for treatment.

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

2. Allergic contact dermatitis from chromium (VI) in cement

At risk: Bricklayers, labourers

Controls: Once a person is sensitised they react to small amounts for life. Cement is used within the storage period printed on the bag, which is the period its chromium-reducing agent stays effective — out-of-date bags go back, they are not used up. Waterproof gloves the COSHH assessment names, changed when wet inside; skin checks by a responsible person under COSHH 2002 reg 11 where the assessment identifies regular contact; a diagnosed case is reported under RIDDOR.

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

3. Cement and lime dust when opening, tipping and emptying bags

At risk: Mixer operator, others downwind

Controls: Bags opened with a knife at the mouth of the running mixer, never torn and shaken; tipped low and slowly with the operator upwind; empty bags folded into a sack, not shaken out or thrown. Mixing station away from walkways and other trades. FFP3 RPE, face-fit tested, while tipping. Where tipping is continuous all day, pre-blended silo or ready-to-use mortar is the control, not more RPE.

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

4. Serious eye damage from cement and hydrated lime dust and splashes

At risk: Mixer operator, bricklayers

Controls: Both products are classed on their safety data sheets as causing serious eye damage. Safety goggles, not open spectacles, while tipping and knocking up; an eyewash station at the mixing point, not in the site office; a splash is irrigated at once with clean water for as long as the data sheet directs, and the person taken for medical assessment with the data sheet.

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

5. Entanglement, crushing and electric shock at the mixer or silo outlet

At risk: Mixer operator

Controls: Mixer on firm, level ground with the drive guard fitted and the drum tilt lock working; reduced low voltage, battery or engine-driven supply with the lead clear of water and wheel paths. Hands and tools never reach inside a turning drum or a silo outlet: material is tipped from the shovel at the mouth, and forced-action mixers are loaded only through the grille. Isolated before cleaning out or clearing a blockage; pre-use check daily; a defective mixer is tagged out.

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

6. Admixtures, plasticisers, frost-proofers and pigments

At risk: Mixer operator

Controls: Only the admixtures the specification or mortar supplier names. Each has a COSHH assessment taken from its safety data sheet and briefed before first use; dosed with the measuring vessel supplied, never poured by eye; decanted only into labelled containers; spills dealt with as the data sheet says; containers back to the COSHH store at the end of the shift.

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

7. Handling bagged cement and lime, sand and full mortar tubs

At risk: Labourers

Controls: Pallets set down by machine beside the mixer, not across the site; bags taken from waist-height stacks, not from the ground or overhead; mortar moved to the workface in tubs by dumper, forklift or telehandler, never carried in buckets up ladders; mortar boards on stands at waist height; the handling assessed, not left to habit.

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

8. No means of washing cement off — skin left contaminated for hours

At risk: Bricklayers, labourers

Controls: Washing facilities with warm water, soap and towels provided on site, close enough to the mixing station that people actually use them; hands and forearms washed before breaks, eating and smoking; after-work skin cream available — barrier cream is not a substitute for gloves.

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

- Before mixing starts, read the safety data sheets for the cement, lime and any admixture on site. Brief the COSHH assessment for this mix to the mixer operator and every bricklayer, and issue the gloves, goggles and RPE it names.
- Check each cement delivery against the packing date, storage conditions and storage period printed on the bag, and store bags dry as the bag directs. Return out-of-date, damp or split bags; do not use them up.
- Set up the mixing station on firm, level ground away from walkways and other trades. Put the eyewash station at the mixer and confirm the washing facilities are working. Pallets set down beside it by machine.
- Pre-use check the mixer: guard, grille, tilt lock, lead or fuel, stop control. A defective mixer is tagged out and reported.
- Put on gauntlets, goggles and RPE, with trousers over boot tops, before the first bag is opened.
- Open bags with a knife at the mouth of the running mixer; tip low and slowly, standing upwind; tip material from the shovel at the mouth, or through the grille of a forced-action mixer. Add admixtures with the measuring vessel only.
- Discharge into tubs and move mortar to the workface by machine. Boards on stands at waist height.
- During laying and pointing, keep mortar off the skin: change gloves that are wet inside, never kneel in mortar, wash at every break and before eating.
- STOP and wash at once if mortar gets inside gloves, boots or clothing. Irrigate any eye splash at the eyewash station and send the person for medical assessment with the data sheet.
- At the end of the shift, isolate the mixer before cleaning it out. Admixtures back to the COSHH store; empty bags bagged and removed.
- Anyone reporting redness, cracking or itching of the hands or forearms is referred through the health surveillance arrangements the same week, and the cause — gloves, product or practice — is found and changed.

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

- | | |
|--|---|
| Drum or forced-action mixer with drive guard, grille and tilt lock | Dumper, forklift or telehandler for mortar distribution |
| Mortar silo, set up and filled by the supplier, where specified | Eyewash station at the mixing point |
| Measuring vessels for admixtures | Washing facilities with warm water, soap and towels |
| Tubs, mortar boards and stands | |

INSPECTION / THOROUGH EXAMINATION REFS**COSHH ASSESSMENT REFS**

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

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|--|--|---|
| ☐ Head protection | ☐ Gloves — task-rated | ☐ Waterproof gauntlet gloves |
| ☐ Safety footwear | ☐ Eye protection | ☐ Safety goggles when tipping and mixing |
| ☐ High visibility | ☐ Hearing protection | ☐ FFP3 RPE (face-fit tested) when tipping bags |

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)

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.