

ANTI-SLIP TREATMENT OF HARD FLOORS

ACTIVITY RAMS — ADAPT TO SITE BEFORE USE

Chemical etching of tile and stone · wet floors in live premises · pendulum testing

KD-RA-FO-004 Rev A0

Statutory basis: COSHH 2002 regs 6, 7 and 12 with HSE ACOP L5 (6th edition, 2013) for acid and fluoride-based etching treatments, neutralisers and cleaners — including substitution with a less hazardous product where it achieves the result; HSWA 1974 s.3 for occupants and the public using the floor during and after the work. PUWER 1998 for scrubber-dryers and wet vacuums; Manual Handling Operations Regulations 1992 for test equipment. Slip resistance is measured by the pendulum method in BS 7976-2:2002+A1:2013, against the value the specification sets. 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 chemical anti-slip treatments to existing ceramic, porcelain and natural stone floors, and the pendulum test that checks the result: product choice, trial area, pre-cleaning, application and timed dwell, neutralising and rinsing, recovery of rinse water, drying, testing and reopening the floor.

This document does not cover: resin anti-slip coatings with broadcast aggregate (KD-RAMS-FL-003 and KD-RAMS-RN-003), replacement of floor finishes, and routine cleaning.

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. Acid and fluoride-based etching agents — burns, including delayed deep burns

At risk: Operatives

Controls: Many anti-slip treatments are acid-based. A non-fluoride product is considered first where it achieves the specified slip value. Where the safety data sheet lists hydrofluoric acid or fluoride compounds, burns can be deep and painless at first and fluoride is absorbed through the skin: the antidote — usually calcium gluconate gel, as section 4 of the data sheet states — is on site, with operatives trained to use it, before the container is opened, and every fluoride skin exposure goes to hospital after first aid, with the data sheet. Chemical-resistant gauntlets, goggles and visor, apron and boots.

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

2. Vapour and mist from treatments in enclosed areas

At risk: Operatives, others nearby

Controls: Ventilation established before application; products applied by low-pressure sprayer or mop, not as a fine spray; RPE where the COSHH assessment requires it; nobody else in the area.

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

3. Chlorine gas from acid meeting bleach residues

At risk: Operatives

Controls: Floors cleaned with hypochlorite (bleach) products release chlorine when an acid treatment is applied. The client's cleaning products are checked, and the floor is pre-cleaned with a neutral cleaner and rinsed, before any acid product goes down. Products are never mixed.

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

4. Slips on wet, treated and rinsed floors

At risk: Operatives, occupants, the public

Controls: The floor is at its most slippery during treatment and rinsing. The area is closed and barriered — not just coned — with signs at every approach; operatives wear slip-resistant footwear; work progresses away from the exit; the floor is reopened only when dry.

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

5. Work in live premises — shops, entrances, pools and healthcare

At risk: The public, occupants

Controls: Work is programmed out of hours or in closed sections agreed with the occupier; alternative routes and escape routes kept open and signed; chemicals and equipment never left unattended where the public can reach them.

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

6. Electrical equipment in wet conditions

At risk: Operatives

Controls: Scrubber-dryers and wet vacuums are battery or 110 V, or protected by an RCD tested before use; leads inspected and routed out of standing water and away from the machine path (PUWER 1998).

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

7. Acidic rinse water and residues*At risk: The environment, waste handlers*

Controls: Neutralised as the safety data sheet directs, recovered by wet vacuum and disposed of as the data sheet and the site's waste arrangements require — not left to run into drains, gullies or planting.

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

8. Handling and using the pendulum tester*At risk: Operatives*

Controls: The pendulum tester is heavy and awkward: carried in its case by two people or on a trolley, set down not dropped, and used by an operative trained in the BS 7976-2:2002+A1:2013 method. The test area is wetted as the method requires and kept inside the barriered area; knee pads for setting up.

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

9. Out-of-hours and lone working*At risk: Operatives*

Controls: At least two people present during chemical application; for any low-risk lone task, a check-in arrangement agreed with the site; emergency arrangements confirmed each shift.

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 floor material and specified slip resistance value; choose a non-fluoride product where it will achieve it; have the safety data sheet on site and complete the COSHH assessment, including first aid.
- Agree the out-of-hours programme, closed areas and alternative routes with the occupier; find out what cleaning products have been used on the floor.
- Treat and test a small agreed trial area before treating the whole floor.
- Barrier and sign every approach; set up ventilation, eyewash, the first-aid measures and any antidote, wet vacuum and waste containers.
- Pre-clean with a neutral cleaner and rinse to remove bleach and other residues.
- Put on gauntlets, goggles and visor, apron, slip-resistant boots, and RPE where required.
- Apply the treatment to one manageable section at a time and time the dwell exactly as the data sheet states.
- Neutralise and rinse as the data sheet directs; recover all rinse water with the wet vacuum.
- Stop if product reaches skin or eyes — first aid as the data sheet directs, at once, then hospital for any fluoride exposure — or if vapour is noticeable, the barrier is breached, or product escapes the area.
- When dry, test with the pendulum by the BS 7976-2:2002+A1:2013 method and record results against the specified value.
- Reopen only when the floor is dry and tested; dispose of residues and containers; record the product, areas and results.

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

☐ Low-pressure sprayer or mops and buckets	☐ Pendulum tester in its case, with trolley
☐ Scrubber-dryer (battery or 110 V)	☐ Barriers and signs
☐ Wet vacuum	☐ Eyewash station, first-aid measures and antidote the data sheet specifies
INSPECTION / THOROUGH EXAMINATION REFS	COSHH ASSESSMENT REFS

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

☐ Head protection	☐ Eye protection	☐ Chemical-resistant apron
☐ Safety footwear	☐ Hearing protection	☐ Slip-resistant wellington boots
☐ High visibility	☐ Chemical-resistant gauntlets	☐ RPE where the assessment requires
☐ Gloves — task-rated	☐ Goggles and face visor	

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continued

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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-OO-033 — Out-of-Hours and Lone Working Authorisation
For night and closed-period working.

PERMIT NUMBER

KD-PTW-PE-009 — Permit to Enter
For occupied buildings under access control.

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
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Accepted for the site by — principal contractor or site manager review.

PRINTED NAME	ROLE	COMPANY	SIGNATURE	DATE	TIME
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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.