



Risk assessment and method statement

Concrete works RAMS

Formwork, reinforcement and concrete pours. Pre-filled with typical hazards, controls and sequence: edit it for this site.

PROJECT

SITE ADDRESS			
ACTIVITY		RAMS REFERENCE	
Formwork, reinforcement and concrete pours			
CONTRACTOR CARRYING OUT THE WORK		PRINCIPAL CONTRACTOR	
PREPARED BY	APPROVED BY	REVISION	DATE

Revision record

Reissue and rebrief when the sequence, the programme, the team or the conditions change. If you would have written it differently had you known, it needs a new revision.

REV	DATE	WHAT CHANGED	BY

THE WORK

The activity, the place and the people

Pre-filled for this kind of work. Make every line specific to this site: this sequence, this access, these people, this weather.

Scope of the activity

What is being done, and what is not included.

MHSWR REGULATION 3(1)

Formwork, reinforcement and in situ concrete for [slab / bases / walls / columns] as shown on [drawing ref]. Concrete placed by [pump / crane and skip / direct from the wagon], then finished, cured and struck. Formwork to [temporary works design ref]. Not included: [list any exclusions].

Location and access

Where on site, how people and materials get there, and the restrictions.

Site access via [gate]. Wagon route [route] to the standing area at [location], kept apart from pedestrian routes by barriers. Pump position [location], on ground agreed with [name]. Washout at [location]. Working hours [08:00 to 17:00].

Programme and interfaces

When the work runs, and who else is working nearby.

CDM REGULATION 15(2)

START DATE

DURATION

WORKING HOURS

INTERFACES WITH OTHER TRADES

Other trades near the pour: [trades], kept outside the pump and lift exclusion zones. Piling contractor: [name], for rig zones, working platform and pile heads. Pump hire company: [name]. Crane: [contractor].

Documents this RAMS relies on

Drawings and bending schedules [refs]. Temporary works design and check [ref]. Permit to load and strike record. Lift plan [ref]. Pump booking and ground details. Concrete delivery tickets. Construction phase plan.

The team, and their competence

CDM REGULATION 8

ROLE	NAME	CARD, TICKET OR TRAINING NEEDED	CONTACT
Temporary works coordinator		Appointed for the formwork and falsework, and signs the permit to load and the strike.	
Formworkers and steel fixers		Trained and experienced in the formwork system and the reinforcement work.	
Pump operator		Supplied by the pump hire company, trained and carded, for example under CPCS, for the pump and boom in use.	
Slinger signaller		CPCS or NPORS card, for crane skips and rebar lifts.	
Banksman		Trained for reversing wagons and pumps on site.	
Power float operator		Trained on the machine, walk-behind or ride-on.	

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METHOD STATEMENT

The sequence of work

The order the team will work in on the day, with the controls built into each stage. If the sequence changes on site, revise the RAMS and brief it again.

STAGE	WHAT IS DONE, AND HOW	CONTROLS AT THIS STAGE	BY
Before the day	Review the drawings, the temporary works design and the pour sequence. Book the concrete, the pump or crane, and agree the wagon route, pump position and washout point.	Temporary works design on site; lift plan for any crane; RAMS approved by the principal contractor.	Contracts manager
Arrival and briefing	Sign in, attend the induction, then brief the team on this RAMS, the pour sequence, the wagon route and cement first aid. Check tools, plant and cards.	Briefing signed against this revision; plant pre-use checks recorded; eyewash and washing water at the pour.	Supervisor
Formwork and falsework	Erect the formwork and any falsework to the design, with working platforms and edge protection, and openings covered.	Built to the design and inspected by a competent person; edge protection before work at the edge.	Formwork supervisor
Reinforcement	Fix the reinforcement to the bending schedule, with bundles lifted to the work area, starter bars capped and walkways laid.	Lifts planned with a slinger signaller; caps on protruding bars; tie wire and offcuts cleared.	Steel fixing foreman
Pre-pour check	Check the formwork, falsework, reinforcement, edge protection, access and pour equipment against the design and this RAMS, then release the pour in writing.	Permit to load signed by the temporary works coordinator; pour does not start without it.	TW coordinator
Pump or skip set-up	Bring in the pump and set it up on the agreed ground, or rig the skip on the crane. Run and check the line, and agree signals with the operator.	Stabilisers on spreader plates; boom and crane clear of overhead lines; exclusion zone under the boom or lift path.	Supervisor
Pour and compact	Place the concrete in layers at the rate in the design, compacting with pokers, with a banksman for every wagon movement.	Formwork watched throughout; everyone clear of the end hose until concrete flows smoothly; gloves, wellingtons and eye protection.	Supervisor
Finish and power float	Level and finish the surface by screed, bull float or power float once the concrete is ready to take the machine.	Trowel guards and dead man control checked; vibration exposure planned; ventilation for engines indoors.	Finisher
Cure and protect	Cure the concrete by sheeting, wet curing or compound, and protect it from frost, rain and early loading.	No fuel-burning heaters in sheeted areas without ducting; new slab barriered and signed.	Supervisor
Strike and clear	Strike the formwork and remove props in the order and at the time the design allows, then clean and stack the formwork and clear the area.	Strike released in writing; back-props left where the design requires; nobody below the area being struck.	TW coordinator

CDM REGULATION 15(2): PLAN, MANAGE AND MONITOR THE WORK

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RISK ASSESSMENT

Hazards, controls and the risk that remains

Each significant hazard rated before and after its controls, as likelihood times severity. The ratings are typical: check them for this site.

	LIKELIHOOD		SEVERITY		
	1	2	3	4	5
5	5	10	15	20	25
4	4	8	12	16	20
3	3	6	9	12	15
2	2	4	6	8	10
1	1	2	3	4	5
	1	2	3	4	5

1 to 4 low
 5 to 12 medium
 15 to 25 high

HAZARD	WHO COULD BE HARMED, AND HOW	RISK BEFORE	CONTROLS	RISK AFTER	BY
Formwork or falsework failure during the pour	Operatives on and below the formwork, from a blow-out, a sudden collapse or a deck giving way.	3 x 5 = 15 High	- Formwork and falsework built to a temporary works design that allows for the full wet concrete load and the rate of pour. - Checked against the design and released in writing by the temporary works coordinator before the pour starts. - Pour rate and sequence kept to the design, with a competent person watching the formwork and stopping the pour at any sign of movement.	1 x 5 = 5 Med	TW coordinator
Striking formwork or removing props too early	Operatives striking or working below a slab, beam or wall that cannot yet carry its own weight.	3 x 5 = 15 High	- Striking times and back-propping set by the temporary works designer or engineer, not by the calendar. - Strike released in writing, using cube results or the method in the design where the design requires them. - Struck in the order in the design, with props released gradually and nobody below the area being struck.	1 x 5 = 5 Med	TW coordinator
Falls from formwork, decks and slab edges	Formworkers, steel fixers and concrete teams working on decks, wall forms and unprotected edges.	4 x 5 = 20 High	- Edge protection on decks and slab edges: a top guard-rail at least 950mm high, no gap over 470mm, and toe boards. - Working platforms on wall and column forms, with access by tied ladder or stair, never by climbing the formwork. - Openings in decks covered with fixed, marked covers or guarded before the area is used.	1 x 5 = 5 Med	
Protruding reinforcement	Anyone who falls onto, walks into or trips over starter bars and projecting rebar.	3 x 4 = 12 Med	- Protruding starter bars capped or covered wherever anyone could fall or walk onto them. - Walkways across fixed reinforcement on boards or mesh walkways, not on the bars. - Offcuts and tie wire cleared from decks and the pour area as work goes on.	1 x 4 = 4 Low	
Manual handling of rebar, shutters and props	Steel fixers and formworkers carrying bars, mesh sheets, panels and props.	4 x 3 = 12 Med	- Bundles of rebar, mesh and formwork panels lifted by crane or telehandler to where they are used, not carried by hand. - Long bars and full mesh sheets carried by two people; lighter panel systems chosen where practicable. - Knee pads for fixing at slab level, and rest breaks planned for long fixing shifts.	2 x 3 = 6 Med	
Concrete pump set-up and boom	Operatives at the pour, and anyone near the outriggers, boom or truck when it is set up or moves.	3 x 5 = 15 High	- Pump set up on hard standing provided by site management, stabilisers deployed to the maker's instructions on spreader plates, clear of excavations and voids. - Pump booked with a trained operator, and a competent supervisor from the hirer with the pump from start to finish. - Nobody under the boom; overhead lines identified before the pump arrives and the boom kept well clear.	1 x 5 = 5 Med	
Pump line blockage and end hose whip	The hose hand and operatives at the end hose when a line blocks, bursts or clears suddenly.	3 x 4 = 12 Med	- Everyone clear of the end hose until concrete flows smoothly, at the start and after a blockage: the danger zone is twice the hose length across. - No line opened under pressure: pumping stopped and reversed to release it, people moved clear, then opened at the safest point. - Couplings, pins and clips checked before the pour, with signals agreed between the pour and the operator.	1 x 4 = 4 Low	
Skip pours by crane	Operatives guiding the skip and anyone under the lift path.	3 x 5 = 15 High	- Lift planned by a competent person, with a trained slinger signaller in charge and a lift plan for the crane. - Skip and crane with a LOLER thorough examination in date; skip not overfilled and the release checked before each lift. - Skip guided by a tag line, not by hand under the load; nobody under the lift path.	1 x 5 = 5 Med	

MHSWR REGULATION 3(6): WITH FIVE OR MORE EMPLOYEES, RECORD THE SIGNIFICANT FINDINGS

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RISK ASSESSMENT, CONTINUED

More hazards, and those specific to this site

HAZARD	WHO COULD BE HARMED, AND HOW	RISK BEFORE	CONTROLS	RISK AFTER	BY
Truck mixers reversing and washing out	Operatives, banksmen and other trades near wagons on site roads and at the pour.	4 x 5 = 20 High	- Wagon route, standing area and washout point planned and kept apart from pedestrian routes by barriers. - Trained banksmen for every reversing movement; nobody between the wagon and the pump hopper while it reverses. - Washout to a lined area or skip, never to drains, with the driver staying in sight of the banksmen.	1 x 5 = 5 Med	Supervisor
Wet cement burns and dermatitis	Operatives placing, levelling and finishing concrete, and anyone kneeling in it.	4 x 3 = 12 Med	- Waterproof gloves suitable for alkalis, and wellingtons with waterproof trousers worn over them so concrete cannot get in. - Cement washed off the skin straight away, with clean water and welfare at the pour; wet clothing changed. - Skin checks by a trained person before work starts and at intervals, with any problem reported.	2 x 3 = 6 Med	
Concrete and cement splashes to the eyes	Operatives at the end hose, the skip, the vibrator and the mixer.	3 x 3 = 9 Med	- Eye protection worn by everyone at the point of placing and when cleaning down the pump or mixer. - Eyewash at the pour, and the team briefed to rinse at once and get first aid.	1 x 3 = 3 Low	
Vibration from pokers and power floats	Operatives using poker vibrators, vibrating screeds and walk-behind power floats.	4 x 3 = 12 Med	- Vibration data for each tool obtained and trigger time planned per person to stay below the exposure action value of 2.5 m/s² A(8). - Ride-on trowels used in place of walk-behind machines where practicable, and lower-vibration pokers and screeds chosen on their data. - Tools maintained, work rotated, and anyone with tingling or numbness reporting it.	2 x 3 = 6 Med	
Power floating and trowelling machines	Operators of walk-behind and ride-on trowels, and others on the slab nearby.	3 x 4 = 12 Med	- Machines guarded, with a dead man control that stops the blades when released, checked before use. - Operators trained on the machine; nobody else on the slab within reach of the blades. - Petrol or diesel machines used indoors only with enough ventilation, or electric machines chosen instead.	1 x 4 = 4 Low	
Silica dust from cutting, coring and scabbling	Operatives preparing joints and kickers, cutting slabs and coring, and others nearby.	4 x 3 = 12 Med	- Scabbling designed out where possible, by retarders and pressure washing or by joint formers cast into the formwork. - Water suppression or on-tool extraction with an H or M class unit for cutting, coring and grinding. - RPE with an assigned protection factor of 20, face fit tested, and the area kept clear of others.	2 x 3 = 6 Med	
Noise from pokers, saws and breakers	Operatives using noisy tools and those working near them.	3 x 3 = 9 Med	- Quieter tools and methods chosen first, with noise data used to plan exposure. - Hearing protection worn wherever the noise assessment shows exposure can reach 85 dB(A), the upper exposure action value.	2 x 3 = 6 Med	
Curing: heaters, covers and compounds	Operatives sheeting, heating and spraying new concrete, and anyone entering a heated enclosure.	3 x 4 = 12 Med	- Fuel-burning heaters kept out of enclosed or sheeted areas unless the fumes are ducted away; electric heat chosen where possible. - Curing compounds and release agents used to their safety data sheets, by spray with RPE where the sheet calls for it. - Covers weighted down, and a new slab barriered and signed so nobody walks or loads it early.	1 x 4 = 4 Low	
Working beside piling rigs and pile heads	Concrete and formwork teams working next to piling rigs, or breaking down pile heads.	3 x 5 = 15 High	- Our work kept outside the piling exclusion zone, on a working platform with a current certificate. - Pile heads cut down before our pile caps start, by hydraulic croppers or another non-percussive method in place of hand-held breakers where practicable. - Pile bores and open holes covered or fenced before our team works near them.	1 x 5 = 5 Med	

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EQUIPMENT

Plant, equipment and PPE

Plant and equipment

Each item, the checks and certificates it needs, and who may operate it.

PUWER 1998, LOLER 1998

ITEM	CHECKS AND CERTIFICATES	OPERATOR COMPETENCE
Concrete pump and boom	Operator daily checks; inspection certificate in date, on the machine; spreader plates.	Pump hire operator
Concrete skip and crane	LOLER thorough examination in date; release checked before each lift.	Slinger signaller
Poker vibrators	Checked before use; vibration data known for exposure planning.	Trained operative
Power float or ride-on trowel	Guards and dead man control checked; vibration data known.	Trained operator
Formwork and falsework	Inspected against the design before loading and during the pour.	Formwork supervisor
Saws, corers and grinders	Water feed or H or M class extraction working before use.	Trained operative

Personal protective equipment

PPE is the last line of defence, after the controls above. Specify the type, not just the item.

PPE AT WORK REGULATIONS 1992

ITEM	NEEDED	TYPE AND SPECIFICATION
Safety helmet	☒	Worn at all times on the deck and near cranes
Safety footwear	☒	Safety wellingtons for concrete
High-visibility clothing	☒	To site standard
Gloves	☒	Alkali-resistant waterproof; grip gloves
Eye protection	☒	Placing, cutting and cleaning down
Hearing protection	☒	Pokers, saws and breakers
Respiratory protection Type, and face-fit tested	☒	FFP3, face fit tested, for cutting
Harness or restraint Anchor points identified	☐	

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CONTROLS

Substances, permits, emergencies and the environment

Hazardous substances

Each substance and its COSHH assessment.

COSHH 2002, REGULATION 6

SUBSTANCE	COSHH ASSESSMENT REFERENCE	CONTROLS
Wet cement and concrete	[ref]	Alkali-resistant gloves, wellingtons, eyewash; wash skin straight away.
Silica dust from cutting and scabbling	[ref]	Water suppression or H or M class extraction; FFP3 RPE, face fit tested.
Release agents and curing compounds	[ref]	Used to the safety data sheet; gloves, eye protection, RPE if the sheet says.
Engine exhaust from floats and heaters	[ref]	Electric where possible; no fuel heaters in sheeted areas unless ducted.

Permits and plans

PERMIT OR PLAN	NEEDED	REFERENCE
Hot work permit	☐	
Permit to work	☒	
Permit to dig or break ground	☐	
Confined space entry	☐	
Lift plan	☒	
Temporary works design	☒	

Emergency and rescue

First aid, fire, and how someone is rescued.
The rescue plan belongs in the RAMS, not after it.

For cement in the eye, rinse at once with eyewash or clean water and get first aid. For wet cement on the skin, wash it off and remove wet clothing. A formwork failure stops the pour and clears the area below. First aider and kit at the pour, and the nearest accident and emergency department named on the briefing.

Environment and neighbours

Dust, noise, vibration, waste, spills and hours of work.

Wagons and pump washed out only at the lined washout area or skip, never to drains or watercourses. Spill kit at the pour. Surplus concrete returned or set in an agreed area. Formwork offcuts, tie wire and packaging removed from site.

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BEFORE THE POUR

Pre-pour check

Complete before the permit to load is signed. The pour does not start until every line is checked or marked not applicable.

CHECK	WHAT IS NEEDED	RESULT OR REFERENCE	CHECKED BY AND TIME
Design	Formwork and falsework built to the temporary works design, revision on site		
Falsework	Props, bases and bracing as designed; ground or deck below able to carry them		
Formwork	Panels, ties and joints secure; release agent applied; no gaps that would blow out		
Reinforcement	Fixed to the schedule, cover spacers in place, inspected and signed off		
Edge protection	Guard-rails and toe boards at every open edge; openings covered		
Access	Tied ladders or stairs to the deck; walkways over the rebar		
Pump or skip	Position agreed, ground checked, overhead lines identified, signals agreed		
Wagon route	Route, standing area, banksman and washout point set up		
Pour plan	Rate and sequence of pour briefed; someone named to watch the formwork		
Welfare and first aid	Eyewash, washing water and first aid kit at the pour		
Permit to load	Signed by the temporary works coordinator, with its reference		

CDM 2015 REGULATION 19(2); HSE TEMPORARY WORKS GUIDANCE AND BS 5975-1:2024.

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Briefed before the work starts

DATE AND TIME

A SIGNATURE AGAINST A REVISION, ON A DATE, BEFORE THE WORK STARTED, IS HOW A BRIEFING IS EVIDENCED

A pre-filled starting point, not legal advice. Edit it for the site and have it approved.