

Cleanroom Epoxy Flooring System

A dense, seamless, low-maintenance floor for controlled environments.

Supply and apply a seamless epoxy flooring system using [MR. JO Eco Floor](#) for cleanroom applications, complete with compatible substrate preparation, primer and underlay where required, to provide a dense, hygienic, low-maintenance and easy-to-clean floor suitable for controlled environments.

In a controlled environment the floor is a validated surface: seamless, non-shedding, chemically cleanable and continuous into the wall, and it must stay that way through years of daily sanitisation. Cleanroom work is sequencing work - a defect trapped in the build-up cannot be cleaned out later.

Standard Bill of Materials

Items 1-6 are the standard build-up; items 7 and 8 as specified. Clauses in full on page 2.

#	Work Item	Description	MR. JO Product	UOM	Ref
1	Surface Preparation	Mechanically prepare to a clean, sound substrate; clean down before any coating work.	Grinding / shot blasting	Sq.m	A1 - A4
2	Concrete Repairs	Repair all cracks, pits, honeycombs and spalled edges flush; defects become cleaning issues.	MR. JO Tecseal - CRP	Kg	B1, B2
3	Crack Injection (where required)	Pressure-inject structural cracks; finish the repaired surface flush.	MR. JO Inject - LVC	Kg	B3.1 - B3.4
4	Primer	Seal the substrate completely; pinholing in a cleanroom floor is a validation problem.	MR. JO Eco Primer - P50I / MR. JO Primer - UPS	Sq.m	C1, C2
5	Levelling Underlay	Where required: 2 mm flowable underlay giving a smooth, uniform base.	MR. JO Eco Underlay	Sq.m	D1
6	Self-Levelling Flooring	2 mm solvent-free self-levelling epoxy as the dense, seamless finished floor.	MR. JO Eco Floor	Sq.m	E4
7	Epoxy Coving	25 / 50 / 75 mm seamless coving removing the floor-to-wall junction.	MR. JO Eco Underlay (tampable)	Rmt	F3.1 - F3.3
8	Wall Coating	Where walls are in the same package: two coats, washable and hygienic.	MR. JO Wallkot - HB	Sq.m	E2

MR. JO Insight

A cleanroom floor is not made hygienic by the flooring material. It is made hygienic by the absence of junctions - coving at the wall, sealed detailing at drains, thresholds and plinths, and no laps in the field. Specify the terminations, and the floor will validate.

Typical Uses

Sector	Where This Floor Is Specified
Pharmaceutical Cleanrooms	Manufacturing suites, granulation, filling and corridor areas
Food Processing Cleanrooms	High-care preparation, packing and washdown areas
Biotechnology Facilities	Laboratory and process areas under controlled classification
Medical Device Mfg.	Assembly, packing and sterile handling areas

Reference - Standard BOQ Clauses

Full clause text from the **MR. JO Standard BOQ Clause Library**, for direct use in a project Bill of Quantities or tender specification.

A - Surface Preparation — Select one clause based on the actual condition of the existing floor.

Ref	Typical Condition / Application	BOQ Description	UOM
A1	Sound concrete requiring normal preparation	Mechanically prepare the concrete substrate by diamond grinding to remove laitance, weak concrete and surface contamination, producing a clean, sound and open textured surface suitable for receiving the specified epoxy primer and flooring system. The prepared surface shall be cleaned and made ready to receive further epoxy treatment.	Sq.m
A2	Weak concrete requiring aggressive profiling	Mechanically prepare the concrete substrate by captive shot blasting or equivalent approved mechanical method to remove weak concrete, laitance and contaminants, producing a clean, sound and uniformly textured surface suitable for receiving the specified epoxy primer and flooring system.	Sq.m
A3	Existing floor having heavy contamination or existing coatings	Mechanically prepare the concrete substrate using suitable grinding, scarifying or other approved mechanical methods necessary to remove existing coatings, oil contamination and weak concrete to expose a sound substrate suitable for receiving the specified epoxy flooring system.	Sq.m

Ref	Typical Condition / Application	BOQ Description	UOM
A4	Where acid etching is specifically approved	Prepare the concrete surface by acid etching using a suitable acid solution followed by washing and neutralisation where required to produce a clean concrete surface suitable for receiving the specified epoxy primer and flooring system.	Sq.m

B - Concrete Repairs — Complete defect closure is essential in controlled environments.

Ref	Typical Condition / Application	BOQ Description	UOM
B1	Minor cracks, pits, honeycombs and surface defects	Repair minor cracks, pits, honeycombs and surface defects using <u>MR.JO Tecseal - CRP</u> , a solvent-free epoxy repair mortar. Repairs shall be completed flush with the surrounding concrete and made ready to receive the specified primer and flooring system.	Kg
B2	Damaged edges and local spalled concrete	Repair damaged concrete edges and localised spalled areas using <u>MR.JO Tecseal - CRP</u> to restore the original profile prior to installation of the flooring system.	Kg
B3.1	Structural cracks requiring epoxy injection	Drill holes and fix injection nipples at suitable spacing along the crack to facilitate pressure injection.	Nos.
B3.2	Structural cracks requiring epoxy injection	Seal the exposed crack surface using <u>MR.JO Tecseal - CRP</u> to prevent leakage of injection resin during the injection process.	Kg
B3.3	Structural cracks requiring epoxy injection	Supply and inject <u>MR.JO Inject - LVC</u> , a low-viscosity epoxy injection resin, under pressure until complete filling of the crack is achieved.	Kg
B3.4	Structural cracks requiring epoxy injection	Remove injection nipples and finish the repaired surface flush, leaving it ready to receive the specified epoxy flooring system.	Nos.

C - Primers — Select one clause based on substrate moisture condition.

Ref	Typical Condition / Application	BOQ Description	UOM
C1	Sound, dry concrete	Supply and apply <u>MR.JO Eco Primer - P50I</u> , a two-component solvent-free epoxy primer, over the prepared concrete substrate to seal the surface, improve adhesion and provide a suitable bonding layer for the specified epoxy flooring system.	Sq.m
C2	Damp concrete where drying is impractical	Supply and apply <u>MR.JO Primer - UPS</u> , a solvent-free moisture-tolerant epoxy primer, over the prepared concrete substrate to provide reliable adhesion and a suitable bonding layer for the specified epoxy flooring system.	Sq.m

D - Underlays & Screeds — Include where levels require correction before the flooring layer.

Ref	Typical Condition / Application	BOQ Description	UOM
D1	Floor requiring levelling up to approximately 2 mm	Supply and apply <u>MR. JO Eco Underlay</u> as a 2 mm flowable epoxy underlay to restore floor levels and provide a smooth, sound substrate ready to receive the specified epoxy flooring system.	Sq.m

E - Topcoat — E4 is mandatory. Include E2 where walls are coated in the same package.

Ref	Typical Condition / Application	BOQ Description	UOM
E4	2 mm Self Levelling Floor	Supply and apply <u>MR. JO Eco Floor</u> as a 2 mm solvent-free self-levelling epoxy flooring system over the approved primer.	Sq.m
E2	General purpose wall coating	Supply and apply two coats of <u>MR. JO Wallkot - HB</u> , followed by one clear sealing coat where a high-gloss finish is required, over the approved primer to provide a seamless, washable and hygienic epoxy wall finish.	Sq.m

F - Finishing & Ancillary Works — Coving is normally mandatory in controlled environments.

Ref	Typical Condition / Application	BOQ Description	UOM
F3.1	Light-duty hygienic areas	Supply and install a 25 mm x 25 mm seamless epoxy coving using <u>MR. JO Eco Underlay</u> applied at tappable consistency, integrally bonded between the floor and wall to provide a smooth, hygienic and easy-to-clean transition.	Rmt
F3.2	General industrial, food processing and pharmaceutical areas	Supply and install a 50 mm x 50 mm seamless epoxy coving using <u>MR. JO Eco Underlay</u> applied at tappable consistency, integrally bonded between the floor and wall to provide a durable, hygienic and easy-to-clean transition.	Rmt
F3.3	Heavy-duty industrial and wet processing areas	Supply and install a 75 mm x 75 mm seamless epoxy coving using <u>MR. JO Eco Underlay</u> applied at tappable consistency, integrally bonded between the floor and wall to provide a robust, impact-resistant and hygienic floor-to-wall transition.	Rmt

Specification Notes

- Where static dissipation is required in addition to cleanroom performance, specify the antistatic self-levelling flooring system in place of this system.
- Where chemical exposure is expected in addition to cleanroom performance, refer to the chemical-resistant flooring systems and consult Ask MR. JO Technical Services.
- Cleanroom classification, the cleaning and sanitisation regime, temperature and any validation requirements should be declared before the specification is finalised.



Strength to **BOND**
Power to **PROTECT**

Ask MR. JO

For help selecting a flooring system, adapting these clauses to your site conditions or developing a complete specification, ask MR. JO - we will help you choose based on what your floor is expected to do, not simply on product names, thickness or budget. Projects outside the scope of these standards should be referred to Ask MR. JO Technical Services.