

Antistatic Epoxy Floor Coating System

Controlled static dissipation for electronics assembly, control rooms and static sensitive areas.

Supply and apply a conductive epoxy floor coating system using MR. JO Primer - AS and MR. JO Floorkot - AS, to achieve the specified electrical resistance while providing a seamless industrial floor finish.

Antistatic flooring is not defined by a conductive coating alone. Its electrical performance depends on every layer - substrate preparation, surface repairs, the conductive primer that forms the conductive plane, the copper grid bonded over it and connected to designated earthing points, and the conductive topcoat. Leave one of those out and the floor may look right and still measure wrong. In this system the build sequence is also the earthing path.

Standard Bill of Materials

Items 1-6 are the standard build-up; item 7 is specified where required. Clause references are set out in full on page 2.

#	Work Item	Description	MR. JO Product	UOM	Ref
1	Surface Preparation	Mechanically prepare to a clean, sound, uniformly textured substrate; contamination breaks electrical continuity.	Grinding / shot blasting	Sq.m	A1 - A4
2	Concrete Repairs	Repair cracks, pits, honeycombs and spalled edges flush to give a continuous plane.	<u>MR. JO Tecseal - CRP</u>	Kg	B1, B2
3	Crack Injection (where required)	Pressure-inject structural cracks; finish the repaired surface flush.	<u>MR. JO Inject - LVC</u>	Kg	B3.1 - B3.4
4	Conductive Primer	Forms the conductive plane of the system - a standard epoxy primer must not be substituted.	<u>MR. JO Primer - AS</u>	Sq.m	C3
5	Copper Grid Installation	Bonded copper tape grid to the approved layout, connected to designated earthing points.	Conductive copper tape	Rmt	F1
6	Conductive Floor Coating	Two coats over the conductive primer and grid, completing the floor and the dissipative path.	<u>MR. JO Floorkot - AS</u>	Sq.m	E8
7	Line Marking (optional)	50 / 75 / 100 mm demarcation lines for walkways, equipment zones and routes.	<u>MR. JO Floorkot - YLW</u>	Rmt	F4.1 - F4.3

MR. JO Insight

Specify the number, not the adjective. "Antistatic", "ESD" and "conductive" describe intent; a resistance range in ohms, measured to a stated test standard, describes a requirement. Grid spacing, primer selection and topcoat thickness are all set by that number, so it belongs in the specification before the products do.

Typical Uses

Sector	Where This Floor Is Specified
Electronics Assembly	PCB assembly, test and handling areas requiring controlled dissipation
Control Rooms	Instrumentation, server and control areas protecting sensitive equipment
Static Sensitive Areas	Component stores, solvent handling and areas where discharge is a hazard

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
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 — B1 and B2 as required. B3 is the full structural crack injection sequence.

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 — C3 is mandatory. A standard epoxy primer must not be substituted.

Ref	Typical Condition / Application	BOQ Description	UOM
C3	Conductive / antistatic flooring	Supply and apply <u>MR.JO Primer - AS</u> , a conductive epoxy primer, over the prepared concrete substrate as part of the specified antistatic flooring system.	Sq.m

F1 - Copper Grid — Mandatory item. Quantity is derived from the approved grid layout.

Ref	Typical Condition / Application	BOQ Description	UOM
F1	Antistatic / conductive epoxy flooring systems	Supply and install a conductive copper tape grid over the prepared conductive primer in accordance with the approved layout and manufacturer's recommendations. The copper grid shall be securely bonded to the substrate and electrically connected to designated earthing points prior to application of the conductive epoxy flooring system.	Rmt

E - Topcoat — Mandatory item for this system.

Ref	Typical Condition / Application	BOQ Description	UOM
E8	Conductive floor coating	Supply and apply two coats of <u>MR. JO Floorkot - AS</u> over the approved conductive primer as part of the specified antistatic flooring system.	Sq.m

F - Finishing & Ancillary Works — Include as specified for the project.

Ref	Typical Condition / Application	BOQ Description	UOM
F4.1	Standard pedestrian walkways, equipment zones and aisle marking (50 mm wide)	Supply and apply 50 mm wide epoxy line markings using <u>MR. JO Floorkot - YLW</u> over the completed epoxy flooring system in accordance with the approved layout and manufacturer's recommendations. The completed line markings shall provide a durable, abrasion-resistant and clearly visible traffic demarcation.	Rmt
F4.2	Forklift aisles, vehicle routes and safety demarcation (75 mm wide)	Supply and apply 75 mm wide epoxy line markings using <u>MR. JO Floorkot - YLW</u> over the completed epoxy flooring system in accordance with the approved layout and manufacturer's recommendations. The completed line markings shall provide a durable and highly visible traffic guidance system.	Rmt
F4.3	Loading bays, hazardous zones and special industrial demarcation (100 mm wide)	Supply and apply 100 mm wide epoxy line markings using <u>MR. JO Floorkot - YLW</u> over the completed epoxy flooring system in accordance with the approved layout and manufacturer's recommendations. The completed line markings shall provide durable visual segregation of work areas and traffic routes.	Rmt

Specification Notes

- Copper grid spacing, layout and earthing arrangement shall be selected based on the specified electrical resistance requirements. For project-specific conductive flooring requirements, consult Ask MR. JO Technical Services.
- Earthing points are normally provided by the electrical contractor. Responsibility for the earthing connection should be clearly allocated in the tender documents.
- Post-installation resistance testing should be specified as a hold point. Where a seamless self-levelling conductive finish is required instead of a coating, refer to the 2 mm antistatic self-levelling flooring system.

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.