

2 mm Antistatic Self-Levelling Flooring System

A seamless conductive floor for electronics manufacturing, semiconductor and clean electronics facilities.

Supply and apply a 2 mm conductive self-levelling epoxy flooring system using MR. JO Primer - AS and MR. JO Floor ASL - 2, complete with copper grid installation, to provide a seamless conductive floor meeting the specified electrical resistance.

In semiconductor and precision electronics manufacturing the floor must do two things at once: dissipate static to a measured resistance, and be seamless, dense and low-particulating enough for a controlled environment. A conductive coating achieves the first; a conductive self-levelling floor achieves both. Every layer contributes to the measured resistance, so the build sequence is an earthing path as much as a flooring build-up.

Standard Bill of Materials

Items 1-6 are the standard build-up; item 7 where levels must be corrected. Clauses 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 continuity.	Grinding / shot blasting	Sq.m	A1 - A4
2	Concrete Repairs	Repair cracks, pits, honeycombs and spalled edges flush to give a continuous, level 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 SL Flooring	2 mm conductive self-levelling epoxy laid over the primer and grid as the seamless finished floor.	<u>MR. JO Floor ASL - 2</u>	Sq.m	E10
7	Levelling Underlay	Where levels must be corrected first: 2 mm flowable underlay, subject to confirmed compatibility.	<u>MR. JO Eco Underlay</u>	Sq.m	D1

MR. JO Insight

A conductive floor is a system with a measured output, and the measurement is only meaningful once the earthing connection is complete. Test the installed floor to the specified standard, record the results, and treat the copper grid layout drawing as a deliverable.

Typical Uses

Sector	Where This Floor Is Specified
Electronics Manufacturing	Assembly, test and burn-in areas requiring controlled dissipation
Semiconductor Areas	Wafer handling and process areas combining ESD control with low particulation
Clean Electronics	Controlled environments where static control and cleanability are both specified

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 — E10 is the standard item. E9 is the 1 mm alternative where specified.

Ref	Typical Condition / Application	BOQ Description	UOM
E10	2 mm Conductive Self-Levelling Floor	Supply and apply <u>MR. JO Floor ASL - 2</u> as a 2 mm conductive self-levelling epoxy flooring system over the approved conductive primer and copper grid.	Sq.m

Ref	Typical Condition / Application	BOQ Description	UOM
E9	1 mm Conductive Self-Levelling Floor	Supply and apply <u>MR. JO Floor ASL-1</u> as a 1 mm conductive self-levelling epoxy flooring system over the approved conductive primer and copper grid.	Sq.m

D - Underlays & Screeds — Include only where levels must be corrected before the conductive build-up.

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

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.
- Where levelling is required beneath a conductive flooring system, the underlay selection must be confirmed for compatibility with the conductive build-up. Consult Ask MR. JO Technical Services.
- Cleanroom classification, particulate requirements and any chemical exposure in addition to static dissipation should be declared so the system can be matched to the full duty.

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.