

SITE SURVEY REPORT

Electrical Test Results Schedule

Prepared for	Riverside Joinery Ltd
Date	8 Oct 2026
Site	Unit 3, Riverside Trade Park
Prepared by	M. Shah

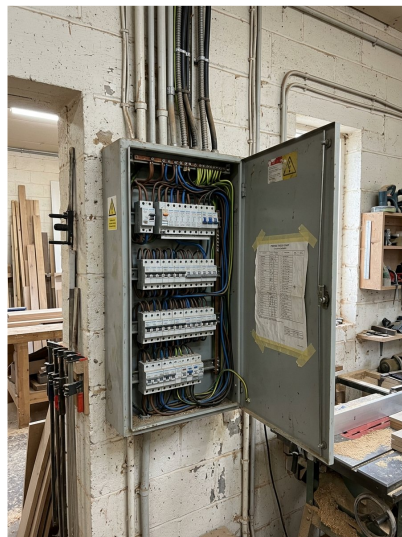
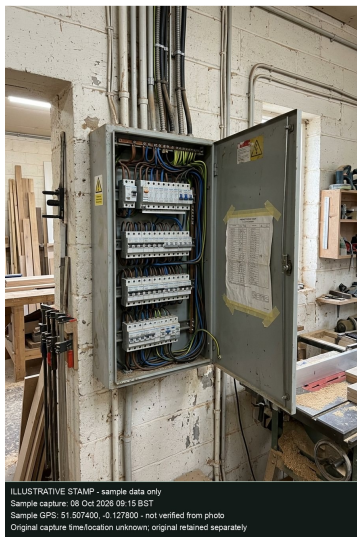
FORM

Electrical Test Results Schedule

1. Board and supply

Project	Unit 3, Riverside Trade Park: board DB1 test results (completed example)
Client	Riverside Joinery Ltd
Site	Unit 3, Riverside Trade Park
Site address	Unit 3, Riverside Trade Park, Derby
Date of the tests	8 Oct 2026
Time	13:00
Tested by	M. Shah
Distribution board reference and location	DB1, workshop entrance

Photos of the board



Illustrative stamp: 8 Oct 2026
09:15 BST · sample GPS 51.5074,
-0.1278. Original photo capture
date/location unverified.

Earthing arrangement	TN-C-S (PME)
Earth fault loop impedance at the board, Z_e or Z_{db} (Ω)	0.21
Prospective fault current (kA)	2.4
Test instrument, serial number and calibration date	Multifunction tester MFT-2, serial 40021, calibrated 3 March 2026

This is a site record of the readings and checks. It is not the BS 7671 certificate or schedule itself: issue that from your registration scheme's or your certification software.

2. Circuits

Circuits tested 1: 1

Circuit number	1
Circuit description	Workshop sockets (ring)
Points served	8
Live conductor (mm ²)	2.5
Protective conductor (mm ²)	1.5
Protective device	RCBO type B
Rating (A)	32
RCD type	Type A
Ring final circuit?	Yes
Ring end to end r1 (Ω)	0.52
Ring end to end rn (Ω)	0.51
Ring end to end r2 (Ω)	0.84
Difference between r1 and rn (Ω)	0.01
(r1 + r2) / 4, the expected R1 + R2 for the ring (Ω)	0.34
Continuity R1 + R2 (Ω)	0.34
Ze + (R1 + R2) (Ω)	0.55
Insulation resistance test voltage	500 V
Insulation resistance, live to live (MΩ)	200
Insulation resistance, live to earth (MΩ)	200
Polarity	Correct
Earth fault loop impedance Zs, measured (Ω)	0.55
Maximum permitted Zs for this device (Ω)	1.37
Measured Zs as a share of the maximum (%)	40

RCD operating time at rated residual current (ms) 22

RCD or AFDD test button operates Yes

Result Pass

Circuit retest readings

Reading date and time	Continuity R1 + R2 (Ω)	Insulation test voltage (V)	Insulation resistance: live to earth (M Ω)	Earth fault loop impedance Zs (Ω)	RCD operating time (ms)	Recorded result	Notes / action taken
08/10/2026 09:15	0.34	500	200	0.55	22	Not assessed	Fictional repeat of the circuit readings; original schedule and assessment remain above.

1 row recorded; no failures flagged

Circuits tested 2: 2

Circuit number	2
Circuit description	Office lighting
Points served	6
Live conductor (mm ²)	1.5
Protective conductor (mm ²)	1
Protective device	RCBO type B
Rating (A)	6
RCD type	Type A
Ring final circuit?	No
Continuity R1 + R2 (Ω)	0.88
Z _e + (R1 + R2) (Ω)	1.09
Insulation resistance test voltage	500 V
Insulation resistance, live to live (M Ω)	200
Insulation resistance, live to earth (M Ω)	180
Polarity	Correct
Earth fault loop impedance Z _s , measured (Ω)	1.09

Maximum permitted Zs for this device (Ω) 7.28

Measured Zs as a share of the maximum (%) 15

RCD operating time at rated residual current (ms) 24

RCD or AFDD test button operates Yes

Result Pass

Circuit retest readings

Reading date and time	Continuity R1 + R2 (Ω)	Insulation test voltage (V)	Insulation resistance: live to earth (M Ω)	Earth fault loop impedance Zs (Ω)	RCD operating time (ms)	Recorded result	Notes / action taken
08/10/2026 09:15	0.88	500	180	1.09	24	Pass	Fictional worked example, transcribed from this record above. No additional test is implied. Recorded circuit result and original schedule retained.

1 row recorded; no failures flagged

Circuits tested 3: 3

Circuit number 3

Circuit description Kitchen sockets (radial)

Points served 4

Live conductor (mm²) 2.5

Protective conductor (mm²) 1.5

Protective device RCBO type B

Rating (A) 20

RCD type Type A

Ring final circuit? No

Continuity R1 + R2 (Ω) 0.65

Ze + (R1 + R2) (Ω) 0.86

Insulation resistance test voltage 500 V

Insulation resistance, live to live (MΩ)	200
Insulation resistance, live to earth (MΩ)	200
Polarity	Correct
Earth fault loop impedance Zs, measured (Ω)	0.86
Maximum permitted Zs for this device (Ω)	2.19
Measured Zs as a share of the maximum (%)	39
RCD operating time at rated residual current (ms)	27
RCD or AFDD test button operates	Yes
Result	Pass

Circuit retest readings

Reading date and time	Continuity R1 + R2 (Ω)	Insulation test voltage (V)	Insulation resistance: live to earth (MΩ)	Earth fault loop impedance Zs (Ω)	RCD operating time (ms)	Recorded result	Notes / action taken
08/10/2026 09:15	0.65	500	200	0.86	27	Pass	Fictional worked example, transcribed from this record above. No additional test is implied. Recorded circuit result and original schedule retained.

1 row recorded; no failures flagged

Circuits tested 4: 4	
Circuit number	4
Circuit description	Dust extractor (radial)
Points served	1
Live conductor (mm²)	4
Protective conductor (mm²)	1.5
Protective device	MCB type C
Rating (A)	20

RCD type	No RCD
Ring final circuit?	No
Continuity R1 + R2 (Ω)	0.41
Ze + (R1 + R2) (Ω)	0.62
Insulation resistance test voltage	500 V
Insulation resistance, live to live (M Ω)	150
Insulation resistance, live to earth (M Ω)	0.6
Below 1 M Ω . The IET gives 1 M Ω as the minimum insulation resistance, with a 500 V d.c. test for circuits up to 500 V. Investigate before the circuit is put into service.	
Polarity	Correct
Earth fault loop impedance Zs, measured (Ω)	0.62
Maximum permitted Zs for this device (Ω)	1.09
Measured Zs as a share of the maximum (%)	57
RCD or AFDD test button operates	Not fitted
Result	Fail
Observations	Low insulation resistance to earth at the extractor isolator. Circuit left off and labelled.

Circuit retest readings

Reading date and time	Continuity R1 + R2 (Ω)	Insulation test voltage (V)	Insulation resistance: live to earth (MΩ)	Earth fault loop impedance Zs (Ω)	RCD operating time (ms)	Recorded result	Notes / action taken
08/10/2026 09:15	0.41	500	0.6	0.62		Fail	Fictional worked example, transcribed from this record above. No additional test is implied. Low insulation resistance to earth at the extractor isolator. Circuit left off and labelled. RCD not fitted; RCD time is not applicable.

1 row flagged, 0 not flagged

Circuits tested 5: 5	
Circuit number	5
Circuit description	Yard floodlights
Points served	3
Live conductor (mm²)	2.5
Protective conductor (mm²)	1.5
Protective device	RCBO type B
Rating (A)	10
RCD type	Type A
Ring final circuit?	No
Continuity R1 + R2 (Ω)	0.77
Ze + (R1 + R2) (Ω)	0.98
Insulation resistance test voltage	500 V
Insulation resistance, live to live (MΩ)	200
Insulation resistance, live to earth (MΩ)	120
Polarity	Correct

Earth fault loop impedance Zs, measured (Ω)	0.98
Maximum permitted Zs for this device (Ω)	4.37
Measured Zs as a share of the maximum (%)	22
RCD operating time at rated residual current (ms)	312

Over 300 ms at the rated residual current. IET guidance gives 300 ms as the maximum for a general non-delay RCD (an S type time-delayed RCD may take up to 500 ms). Check or replace the RCD.

RCD or AFDD test button operates	Yes
Result	Fail
Observations	RCBO took 312 ms at its rated residual current, over 300 ms. Retested twice with the same result. Replacement RCBO ordered.

Circuit retest readings

Reading date and time	Continuity R1 + R2 (Ω)	Insulation test voltage (V)	Insulation resistance: live to earth (MΩ)	Earth fault loop impedance Zs (Ω)	RCD operating time (ms)	Recorded result	Notes / action taken
08/10/2026 09:15	0.77	500	120	0.98	312	Fail	Fictional worked example, transcribed from this record above. No additional test is implied. RCBO took 312 ms at its rated residual current, over 300 ms. Retested twice with the same result. Replacement RCBO ordered.

1 row flagged, 0 not flagged

Circuits tested	5
Circuits passed	3
Circuits failed	2
Insulation under 1 MΩ at 500 V	1
Zs over the maximum	0
RCD slower than 300 ms	1

Highest Zs as a share of its maximum (%) 57

3. Actions and sign-off

Are further actions needed? Yes

Further actions 1: Find and repair the low insulation fault on circuit 4 before re-energising.

What needs doing?	Find and repair the low insulation fault on circuit 4 before re-energising.
Who will do it?	M. Shah
Due date	10 Oct 2026
Status	Open

Further actions 2: Replace the circuit 5 RCBO and retest the operating time.

What needs doing?	Replace the circuit 5 RCBO and retest the operating time.
Who will do it?	M. Shah
Due date	10 Oct 2026
Status	Open
Inspector name	M. Shah
Position or company	Electrician, Shah Electrical (NICEIC)
Inspector signature	

M. Shah

Signing records what was found on the day. It does not make unsafe equipment safe or replace a thorough examination, design check or service by a competent person.