



REQUEST FOR BID CIDB

Supply safety file to be submitted and induction to be attended by successful supplier before work commences

10397088 – Scope of Work

Repair all non-compliance at no.1 Control room as per Scope Below:
Pricing to include all spares required and labor.

1. Several trunking lengths were found with open or missing covers, exposing conductors.
2. Improper joining of cables inside the ceiling void.
3. Open junction boxes with loosely hanging cables.
4. GP wires running barely on cable trays instead of proper enclosures.
5. Incomplete geyser installation, cables hanging out of the conduit without being properly terminated.
6. Exposed wiring on air condition unit.
7. GP wires running inside the ceiling void without enclosures (open wiring).
8. Improper cable entry point into the main DB.
9. Improper cable terminations on junction boxes.
10. Improper earth termination inside switches.

See photos below:

NB – Note that the photos provided below were taken at random in the ceiling void and in case of:

1. Open junction boxes: a lot of them have been mounted throughout the entire length of the trunking and several of them are open without covers exposing connections.
2. Open Wiring: General Purpose wires were run without enclosures inside the ceiling void, linking a number of offices.
3. Open Trunking covers: Extending the entire length of the trunking, with some covers hanging and some missing at all.
4. Improper cable terminations: This is mostly found on junction boxes mounted by the cable trunking side, connections were made without compression glands, allowing cable cords to be suspended by connections.
5. Improper cable joints: Open joints were randomly done inside the ceiling void, taped with insulating tape and left without protection. In some cases, such joints are suspected to have affected the resistance of the earth continuity conductor. The resistance of the earth continuity conductor on the following circuits were found to be above the limit:
 - a) W5 – Administrative Assistant Office.
 - b) W5 – Employee Relations Office
 - c) B4 – OPS Supervisor Office
 - d) B6 – Admin Assistant Office

Fig 1 - Open trucking covers inside the ceiling exposing GP wires – Reception Ceiling Void



Fig 2 - Single core cables running in the ceiling without the proper enclosure – Reception Ceiling Void



Fig 3 - Air con control box without cover exposing cables and connections. - in front of the Conference Room

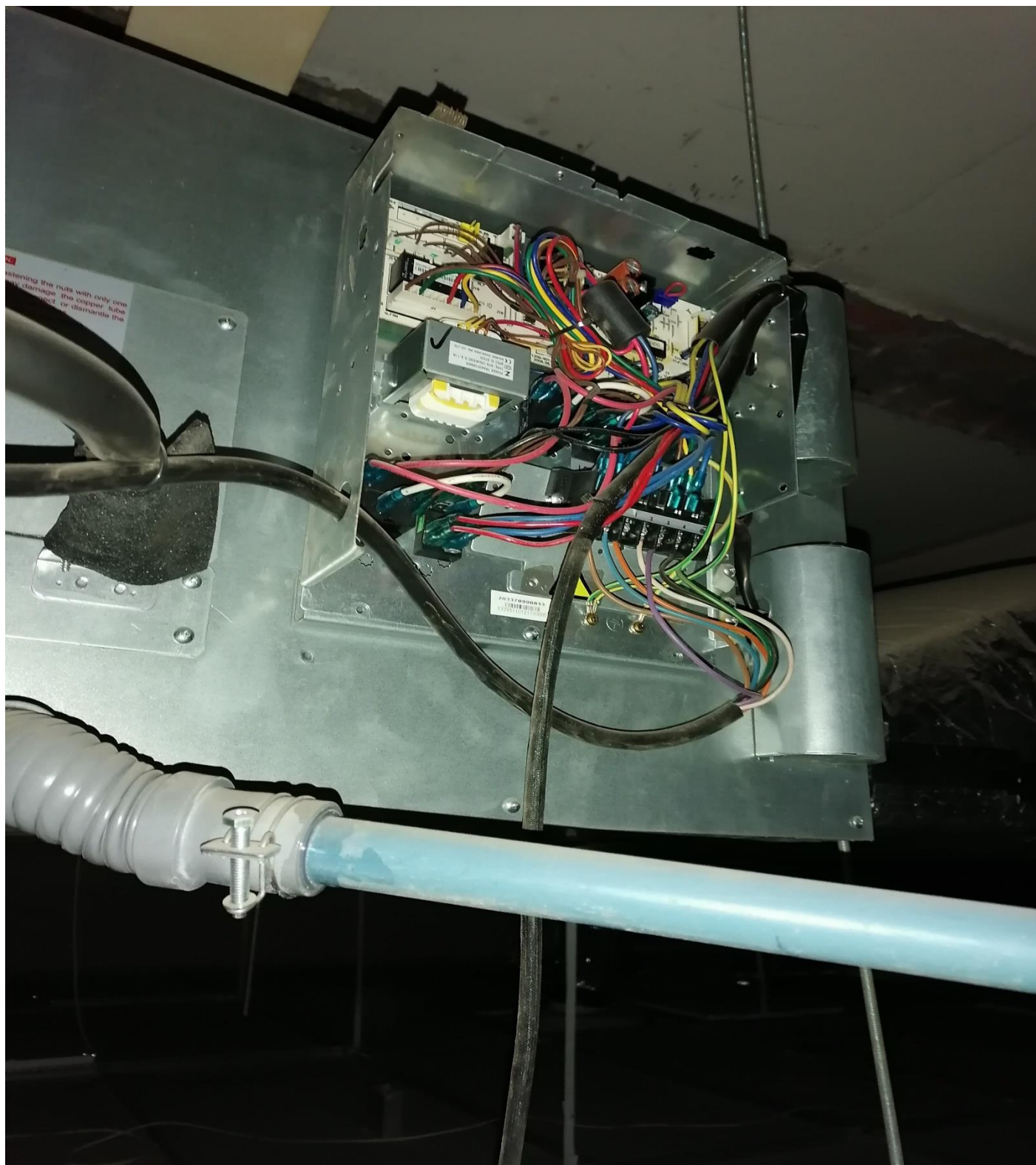


Fig 4 - Single core cables loosely hanging from the open trunking – Office 7 & 8 ceiling Void.



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Fig 5 - Open junction boxes exposing connections and improper cable termination (without the use of glands) – Open Plan (Lavika's Office)



Fig 6 - Open junction boxes exposing connections – Open Plan next to Financial Admin Office



Fig 7 - Open junction boxes exposing connections – Open Plan next to Financial Admin Office



Fig 8 - Trunking with no covers in place exposing GP wires – Between Finance Dept and Control Room



Fig 9 - Cable trunking with open covers - Entrance passage



Fig 10 - Cables improperly joined – Ceiling Void above Supervisor's Office



Fig 11 - Cables improperly joined - Ceiling Void above Supervisor's Office

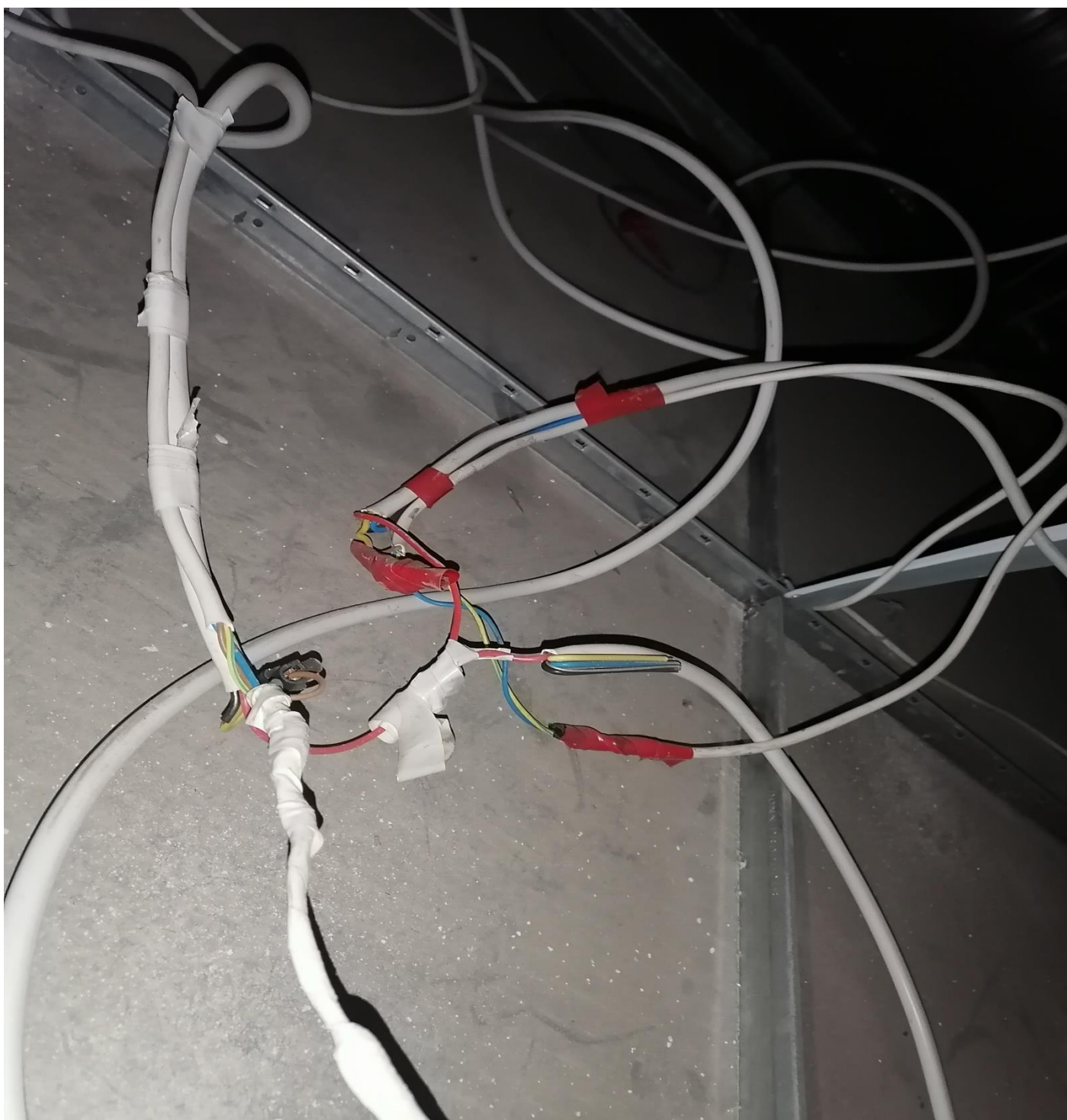


Fig 12 - General Purpose wires running in the cable tray instead of proper enclosed wireway – Cable tray running through a number of offices.



Fig 13 - Improper cable enclosure used, GP wires run on a cable tray - Passage

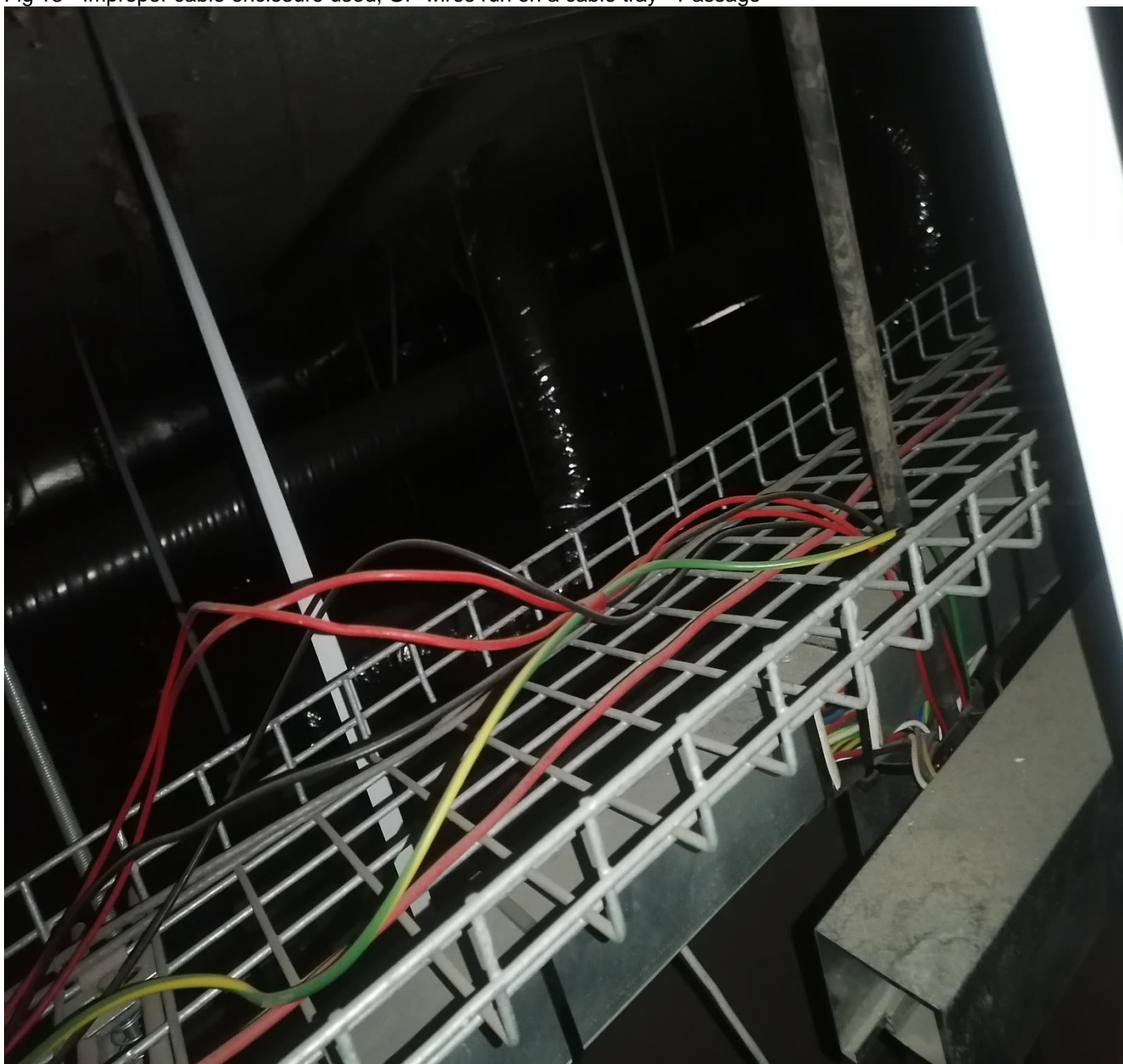


Fig 14 - Trunking not properly covered, cables held by a cable tie – Electrical Room



Fig 15 - Trunking not properly covered.



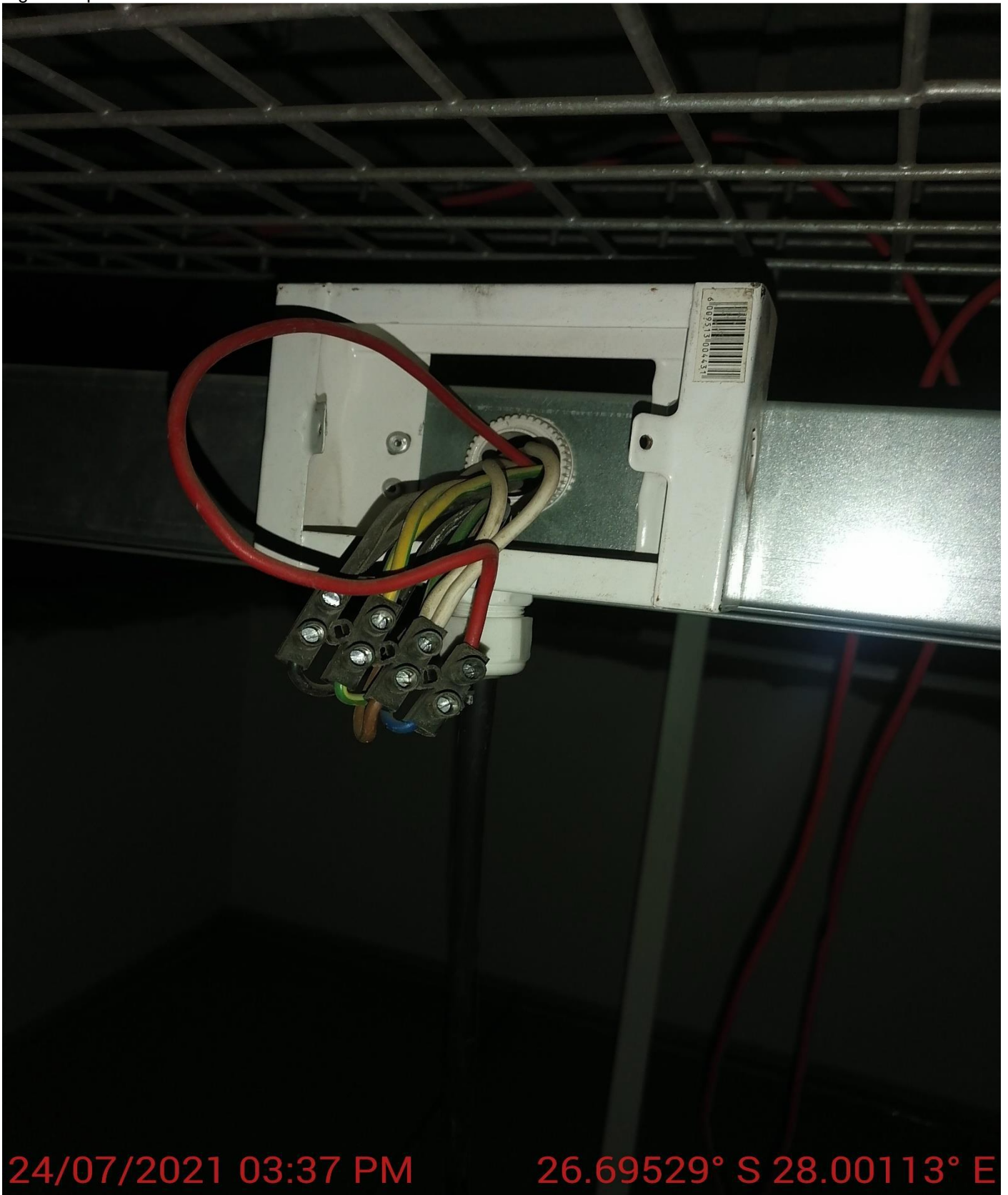
Fig 16 - Geyser cables not connected, geyser isolator missing – Female Toilets



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Fig 17 - Open Junction boxes



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Fig 18 - Improper Cable entry into the DB – Electrical Room



Fig 19 - Open Junction Boxes inside the ceiling void



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Fig 20 - GP Wires running on the cable tray inside the ceiling.



Fig 21 - Open Junction Box exposing conductive parts – Male Toilet Ceiling Void



Fig 22 - Open junction box exposing cables– Ceiling void - Passage in front of the Reception



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Fig 23 - Open Junction box – Tea Kitchen ceiling Void



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Fig 24 - Open junction Box exposing connections – Employee Relations Office Ceiling Void.

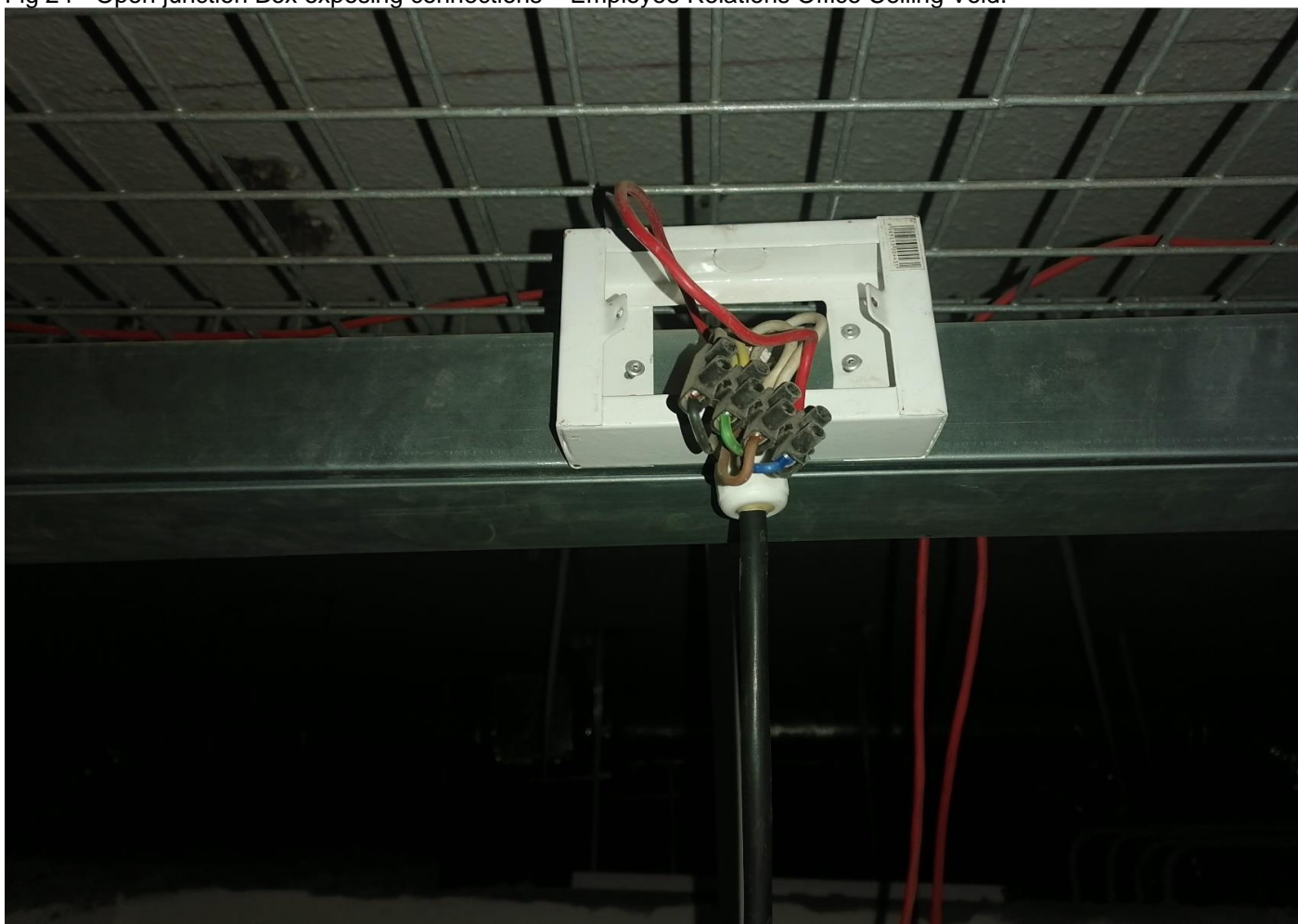


Fig 25 - Improper connections inside the ceiling void – Passage down lights



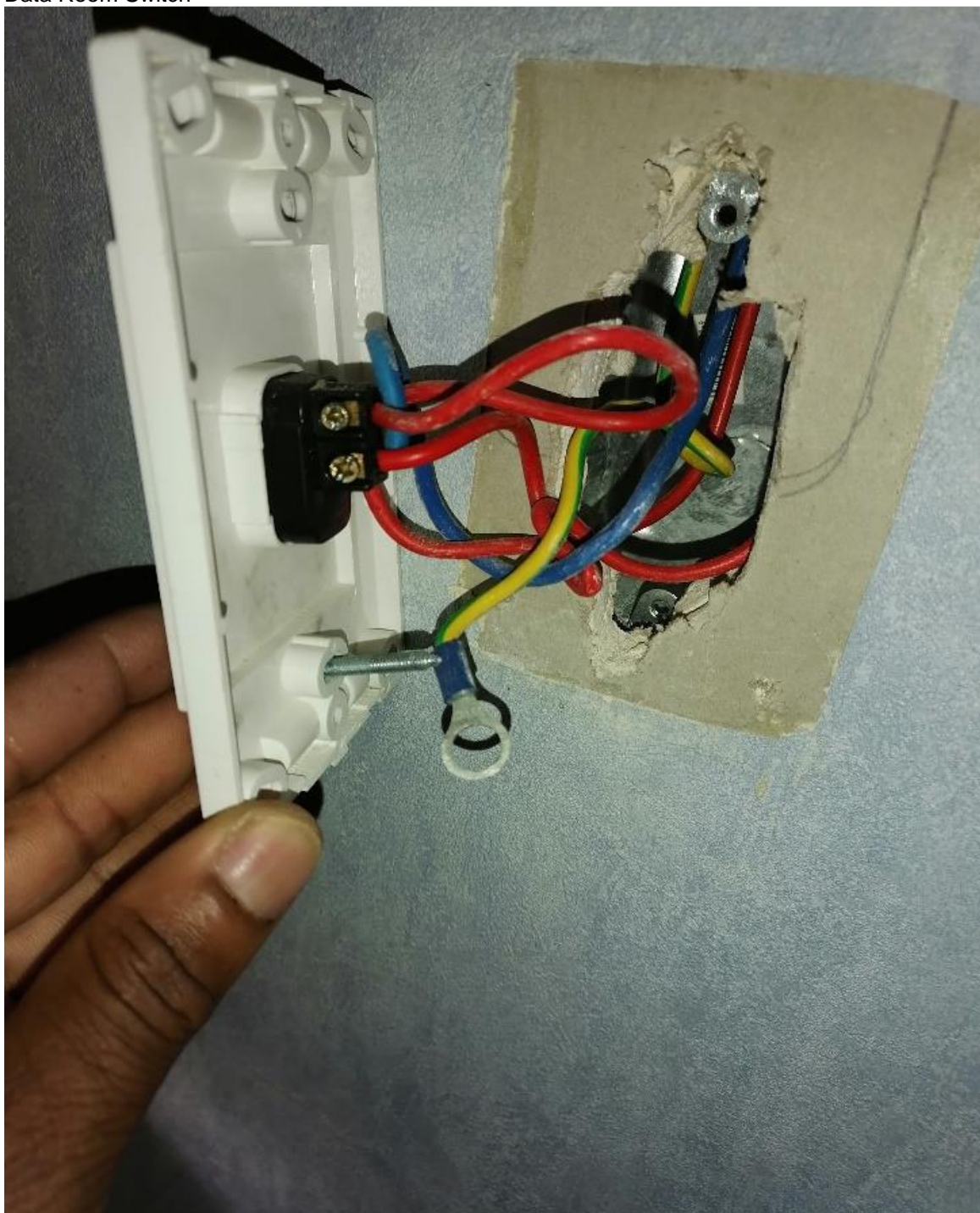
Fig 26 - Improper Cable termination – without compression glands



Fig 27 – Improper earth terminations on switch boxes.
Tea Kitchen Switch



Data Room Switch



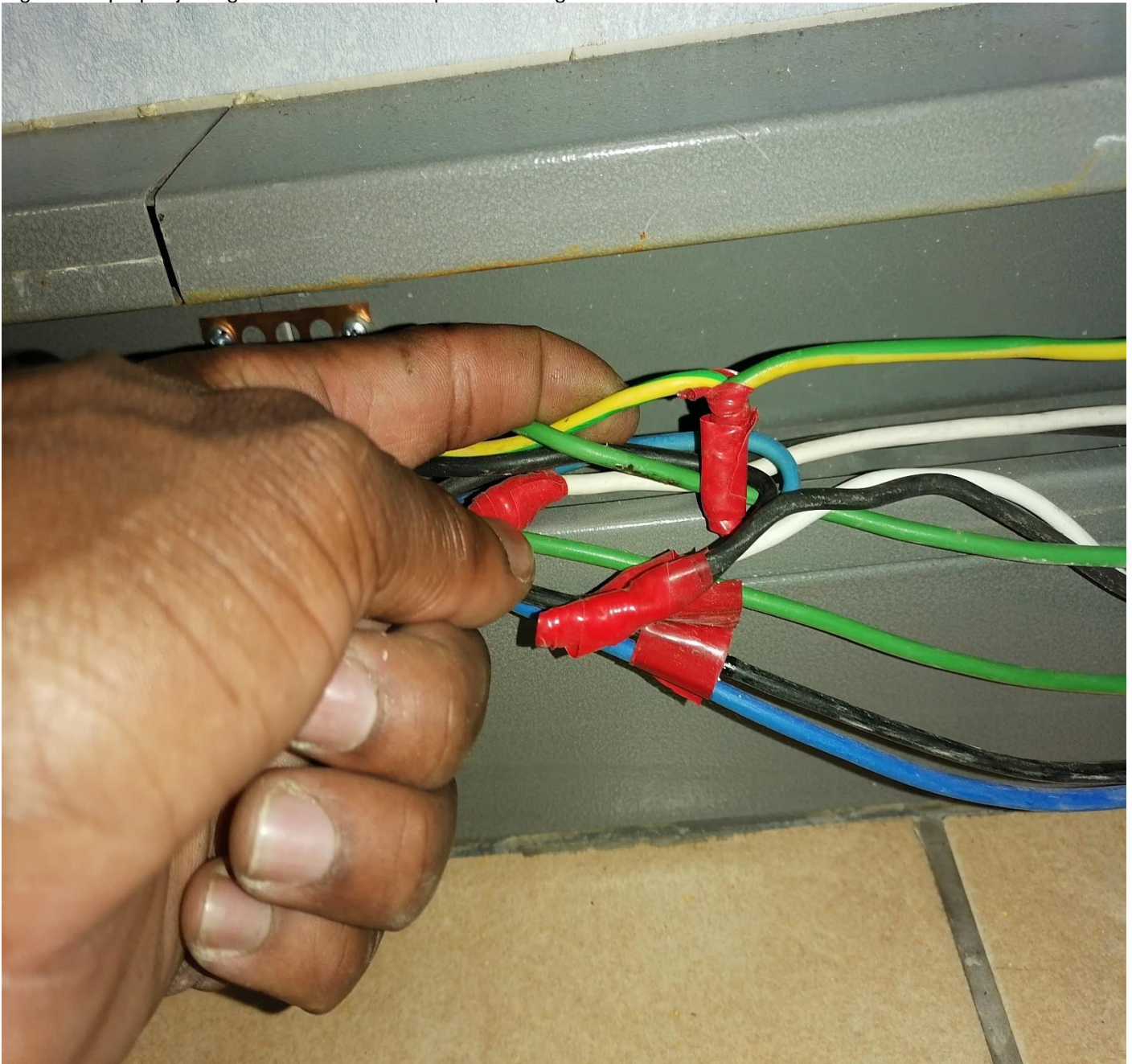
Conference Room Switch



Electrical Room Switch



Fig 28 – Improper joining of cables inside the power skirting.



Conclusion

The above issues amount to non-compliance and require attention prior to the installation certified as compliant.

Annexure C4 - SITE INFORMATION

Work to be done at Rand Water Zuikerbosch

Vischgat Road, Three Rivers East, Vereeniging
S26 41 520 E28 00 061