

WA Electrical Inspectors Bulletin

Issue 1- December 2020

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1 - SWITCHBOARDS

The Electrical Contracting Industry are reminded that switchboards for domestic construction sites shall comply with AS/NZS 3012:2019 and AS/NZS 3000:2018.

Electrical inspectors are well aware that the builder's supplies are only onsite for a short duration however this should not affect the quality or the compliance of the installation.

Electrical inspectors have identified the following common non-compliant trends with the installation of builder's supplies.

1.1 – SWITCHBOARD HEIGHT

In general Inspectors are finding numerous installations where the switchboard enclosure is less than the required 1200mm as per AS/NZS 3000:2018 Section 2.10.2.5.

Note: There is an exception to this clause if access to live parts is arranged in accordance with AS/NZS 3000:2018 Section 2.10.3.1 however this does **not** apply to domestic installations.



Currently 810mm (should be 1200mm)



Currently 970mm (should be 1200mm)

1.2 – GENERAL CONDITION

There is a significant number of builders supplies where the enclosures are in a dilapidated and poor condition. This is non-compliant to AS/NZS 3012:2019 Section 2.3.1.1 (a).

Some of the examples are given below.

- Enclosure lids twisted/distorted and not able to be closed
- Enclosure pole fixings loose
- Enclosure lid hinges broken
- Enclosure lid retention arm missing
- Rusted internal components
- Support structure unstable



Distorted enclosure lid



Distorted enclosure lid



Enclosure lid is removable



Support structure unstable

1.3 – COMPROMISED IP RATING

Due to the poor condition of the lids and pole fixings moisture is ingressing the enclosure, this has led to internal components such as the earth bar/studs and neutral bars becoming rusty and unserviceable.

This is also causing condensation in the protective devices potentially compromising device integrity.

In conjunction with the mandatory verification/testing and checking schedule in AS/NZS 3012: 2019 Section 3 the IP integrity of the enclosures shall be checked.



Compromised IP rating

1.4 – VERIFICATION REQUIREMENTS

To facilitate compliance, switchboards for domestic construction sites be checked and tested prior to being placed into service and meet the requirements of AS/NZS 3012:2019, AS/NZS 3000:2018 with particular attention to AS/NZS 3012:2019 Section 2.3.2.1 (a)-(g).

AS/NZS 3012:2019 Section 3 Verification - All Temporary Builders Supplies shall be verified (checked and tested):

- Prior to introduction into service or return to service after a repair or servicing that could have affected the electrical safety (removed from one site and installed at another).
- Verified at intervals not exceeding those specified in Table 6 of AS/NZS 3012:2019.
- Records of inspections and tests shall be kept as per AS/NZS 3012:2019 Section 3.9 – Documentation.

Note: Please be aware that you may be requested to provide this information by the WA Electrical Inspectors.

COMMUNICATION

This bulletin is intended for Electrical Contractors carrying out electrical installing work on electrical installations supplied by Western Power.

This bulletin is also available via the WA Electrical Inspectors website.

WA Electrical Inspectors - Western Power