
STANDARDS BULLETIN No.: S01 - 063

Subject: Use of stripe fused pillar as the standard distribution pillar in the
Power and Water Low Voltage Reticulation network

Purpose:

The standard distribution pillar for Underground Residential Developments will be the stripe fused pillars as used in the suburbs of Rapid Creek and Millner for the Darwin Undergrounding Project.

Reason:

Standards Bulletin S01-59 details issues that have arisen from the Underground Residential Distribution (URD) pillars (referred to as "green" pillars due to their colour), the standard distribution pillar used throughout the Northern Territory in underground low voltage reticulation networks for many years.

The "green" pillar is now presenting more issues that require serious consideration, including, but not limited to:

- Touch safe requirements.
- Insulating boards are labelled as complying with AS1795, this standard was withdrawn in 1999.
- Moisture ingress into insulating boards resulting in low insulation resistance measurements.
- Lack of an accessible disconnection point, such as that offered in overhead networks.
- Continual damage to external pillar structure.

Requirements:

The standard URD pillar for all new developments with construction approval after the release date of this bulletin, shall be the stripe fused pillar, as shown in PowerWater standard drawing S02-2-3-08.

The following requirements apply to the installation of the stripe fused pillars:

- All pillars, with the exemption of link pillars, shall have a 630 amp stripe fuse base fitted with solid links installed between the incoming feeder cable and the pillar bus bars. The outgoing feeder cable shall be lugged and bolted to the busbar.

- Link pillars shall have 630 amp stripe fuse bases fitted with solid links installed on all incoming, outgoing and tee-off feeder cables.
- All unused slots shall have Perspex sheets attached with nylon bolts placed over all busbars before the pillar is energized.
- In the case where outgoing feeder cables are bolted to the pillar busbars, the Perspex sheet shall be formed to enclose the cables and busbars such that contact with any energized part is not unintentionally possible.
- All incoming, outgoing and tee-off feeder cables and service cables shall have their phasing identified via coloured heat shrink. The heat shrink shall be visible while the cable is terminated in the stripe fuse holder.
- Incoming, Outgoing and tee-off feeder cables shall have their destination tagged on the cable and written on the stripe fuse holder.
- Service cables shall have their destination lot tagged on the cable and have the phasing and lot destination written onto the stripe fuse holder e.g. R:L.1234, W:L.1235, B:L.1236.
- Stripe fused pillars shall fit into the existing "green" pillar easement as shown in standard drawing S02-2-6-17. The stripe fuse pillar shall be located such that the rear face of the enclosure is 100mm from the back of the easement and with an equal distance between the sides of the pillar on the easement sides.
- Refer to standard drawing S02-2-3-08 for the fuse sizes to protect the service cables.

Implementation:

This bulletin comes into effect immediately after the release date of this bulletin. All new development work that is given final construction approval after the release date of this bulletin is to comply with this bulletin.



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