

## Authorisation for the Removal, Replacing and Reinstatement of Service Fuses (SPD)

### Purpose

The purpose of this instruction is for Horizon Power (as the Network Operator) to authorise and provide information to licensed electrical contractors operating within Horizon Power's service areas. It explains how to remove, replace and/or reinstate service fuse(s) at the customer's Service Protection Device (SPD), located on the metering panel.

### Instruction

Fuse cartridges can be removed, replaced and/or reinstated by a licenced electrical contractor – provided they adhere to the following process.

### Fuse type and size (Ampere) for maximum demand $\leq 63$ A

Install the following fuse(s) at the meter.

In accordance with section 6.2.3.1 of the *Western Australia Electrical Requirements 2015*:

- the short circuit breaking capacity rating must be at least **25 kA**.
- the type is IIa current limiting (high rupture capacity) in accordance with IEC 60269-3
- the barrel size is 22 mm in diameter and 57 mm in length

An inspection of the line side active conductors at the meter position is necessary to identify the size of the consumer mains.

For residential properties, the nominal fuse rating shall be as per the table below, according to the number of phases supplied, and the cross-sectional area of the consumer mains cable.

	6 – 10 mm <sup>2</sup> cable	16 mm <sup>2</sup> cable
Single Phase	63 A	63 A
Two Phase	32 A	
Three Phase	32 A	

For certain rural towns, lower capacities may be required, consult section 7.6.1 of the *Western Australian Distribution Connection Manual*.

For industrial and commercial properties, fuse sizes need to be calculated and installed as per the *Wiring Rules* and the installation protection design drawings.

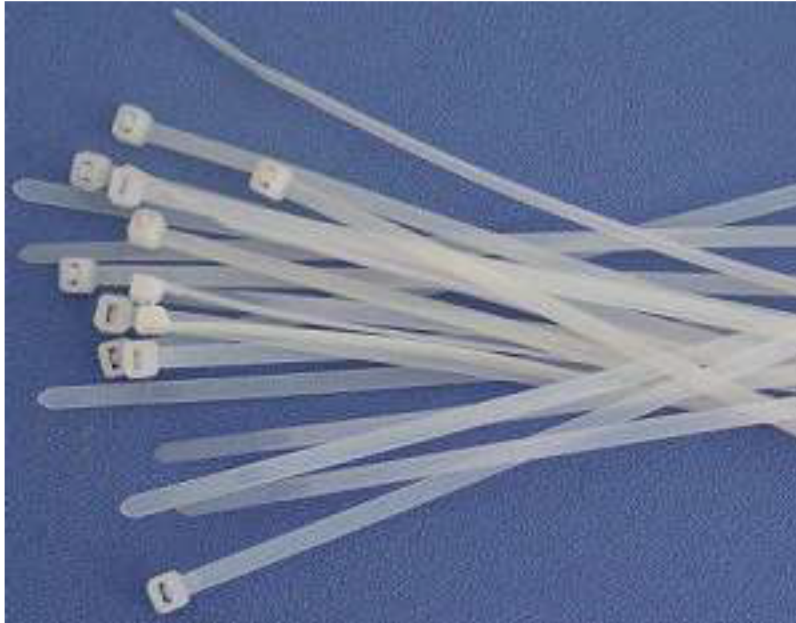
### Where it is suspected that the load exceeds the fuse sizes listed above

The licenced electrical contractor must inform the owner/occupier that a fault call shall be logged on their behalf with Horizon Power (13 23 51), for capacity assessment. This may be subject to a *Design Quotation Assessment (DQA)*.

### Applying cable ties to seal an installed fuse

Horizon Power recommend using cable ties to seal an installed or re-instated fuse. The purpose is to maintain the level of safety (since fuses have traditionally been sealed), and deter inadvertent removal by unlicensed electrical personnel. The cable ties should be light in colour (translucent also accepted), applied securely and deter tampering of the connection.

## Procedure for WA Licensed Electrical Contractors and their Electrical Workers



### Non-standard original fuses

Where the original fuse has a capacity that exceeds that listed in the table above (e.g. a 100 A fuse was installed where a 63 A is appropriate), a fault shall be logged with Horizon Power (13 23 51).

The replacement of similar fuses: 30 A with 32 A, and 60 A with 63 A is acceptable.