



A message from Technical Standards



CitiPower/Powercor Technical Standards Update for June 2021

Please ensure that this information is passed on to all employees and contractors within your organisation.

The following updates are relevant to all technical, field employees and contractors undertaking design, construction and maintenance activities on the CitiPower and Powercor networks.

Technical Standards are available on our [Contractor Portal](#).

*All new design and construction proposals commenced after the **01 August 2021** are required to comply with these updates.*

If you have further questions, please contact the relevant team member associated with the published documents.

Standard Category	Technical Standard	Description	Overview	Impacted Key Stakeholder(s)
D - General	DE305	Distribution Construction Standards - HV Bonding Assembly – Fibre Reinforced Cement Pole	Standards updated and new standards created for the introduction of Fibre Reinforced Cement (FRC) poles. Contact: Alan Su - (03) 9683 4328	DESIGN CONSTRUCTION MAINTENANCE
	DY101-121	Distribution Construction Standards - Bolt Assemblies		
	DY331-391	Distribution Materials Standards - Bolts & Nuts		
E - Overhead	EB Series	Distribution Construction Standards - Poles		
	EE Series	Distribution Construction Standards - Crossarms		
	EF Series	Distribution Construction Standards - Insulators and Attachments		
	EG Series	Distribution Construction Standards - Stays and Anchors		
	EH Series	Distribution Construction Standards - SWER Structures		
	EJ Series	Distribution Construction Standards - HV Three-Phase		

Standard Category	Technical Standard	Description	Overview	Impacted Key Stakeholder(s)
D - General	DE411-705	Distribution Materials Standards - Splices, Sleeves, Links, Lugs	<p>Standards updated as part of a general review to include the latest LED luminaires information and installation requirements for both new and replacement public lighting projects. Standards also updated to align with the new VESI URD standard.</p> <p>Contact: Stephen McGuire - (03) 9297 6414</p>	<p>DESIGN CONSTRUCTION MAINTENANCE</p>
	DG351	Distribution Construction Standards - Earthing Assembly - Public Lighting Columns		
F - Public Lighting	FA081	Distribution Construction Standards - Public Lighting - Servicing Arrangements		
	FB Series	Distribution Construction Standards - Public Lighting Poles		
	FC101	Distribution Construction Standards - Public Lighting - Cables - 6mm ² UG Service Cable Assembly		
	FE101	Distribution Construction Standards - Public Lighting - Brackets and Luminaires - Distribution or Sub-transmission Pole Assembly		
	FE111	Distribution Construction Standards - Public Lighting - Brackets and Luminaires - Spigot Mounted Assembly - Category V		
	FE121	Distribution Construction Standards - Public Lighting - Brackets and Luminaires - Centre Hinged Column Assemblies		
	FE131	Distribution Construction Standards - Public Lighting - Brackets and Luminaires - LV Wood Crossarm Assembly		
	FE801-991	Distribution Materials Standards - Public Lighting - Brackets and Stays - Materials		
	FM011	Distribution Construction Standards - Public Lighting – Connections		

Standard Category	Technical Standard	Description	Overview	Impacted Key Stakeholder(s)
<u>G - Underground</u>	GA001	Distribution Construction Standards - Underground - General Information	Standards updated to align with the new VESI Urban Residential Development (URD) Standard. Contact: Aza Masoudtehrani - (03) 9683 4892	DESIGN CONSTRUCTION MAINTENANCE
	GA080	Distribution Construction Standards - Underground – LV Network Design Guidelines		
	GA211	Distribution Construction Standards - Underground Trenching		
	GB101	Distribution Construction Standards - Cable Assembly - HV Mains - 22kV		
	GB103	Distribution Construction Standards - Cable Assembly - HV Mains - 11kV		
	GC001	Distribution Construction Standards - Conduit and Cable Pulling – General Information		
	GC021	Distribution Construction Standards - Conduit and Cable Pulling – Bending Radius and Pulling Tension		
	GC031	Distribution Construction Standards - Conduit and Cable Pulling – Conduit Selection		
	GC061	Distribution Construction Standards - Conduit and Cable Pulling – Boring and Ploughing		
	GL041	Distribution Construction Standards - Kiosk Substations - Cable Entry, Foundations and Civil Works		
	GS021	Distribution Construction Standards - Underground LV Mains and Service – Pits & Pillars		
	GS101	Distribution Construction Standards - Cable Assembly – LV Mains and Service		
	GS201	Distribution Construction Standards - Pit Assembly – Service		

Standard Category	Technical Standard	Description	Overview	Impacted Key Stakeholder(s)
Permitted Materials	PM005	Permitted Materials - Connectors	Permitted Materials list updated with three new lugs. Contact: Stephen McGuire (03) 9297 6414	DESIGN CONSTRUCTION PROJECT MANAGEMENT OPTION 2 CONTRACTORS

<p align="center"><u>LEGEND</u></p> <p align="center">HIGH IMPACT</p> <p align="center">MEDIUM IMPACT</p> <p align="center">LOW IMPACT</p>
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DE, DY, EB, EE, EF, EG, EH and EJ Series – Fibre Reinforced Cement Pole introduction

Key changes*

Release date: 30 June 2021

**Please refer to official standard for details*

What has changed?:

- Technical Standard series DE, DY, EB, EE, EF, EG, EH and EJ have been updated to include the new Fibre Reinforced Cement (FRC) poles for use within CitiPower and Powercor.
- Additional hardware including gain plates, longer crossarm straps and bolts have been also included for use with these poles.

Why?:

- As hard wood poles become more difficult to source, alternative pole materials have been explored including steel and FRC poles.
- FRC poles are non-conductive, fire rated, lighter than concrete poles and require minimal additional hardware.
- They are a more costly material option however when earthing and lifecycle costs are considered, they can become a more cost-effective solution in certain circumstances.



Figure 1 - FRC Pole cross section



Figure 2 - FRC pole fitted with concrete pole line hardware

GL041, GA, GB, GC & GS Series

Key changes*

Release date: 30 June 2021

**Please refer to official standard for details*

What has changed?:

- Technical Standard series GL, GA, GB, GC and GS have been updated to align with the new VESI URD standard and improve clarity by providing additional guidance.
- The standards have been updated to include:
 - information on kiosk substation reserves, fencing and retaining wall requirements, including the application of non timber fencing (chain wire or colour bond)
 - further guidance and tolerances for the installation of service pits, pillars and bollards, cover slabs and marker tape
 - further guidance and information on the correct application of bedding sand and cable/conduit spacers
 - more diagrams to support information within the standards and remove confusion

Why?:

- The standards have been updated to align with the new VESI Urban Residential Development (URD) standard which specifies common design and construction requirements for URD projects across all five Victorian distribution businesses.
- It has also been updated to allow greater design and construction flexibility.

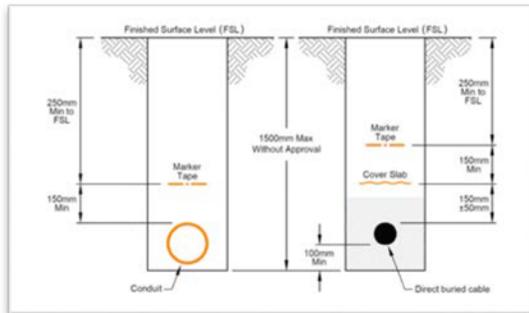


Figure 1 – Cover slab and marker tape information

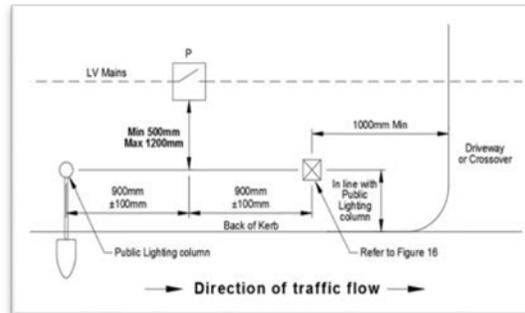


Figure 2 – Pillars and bollard information

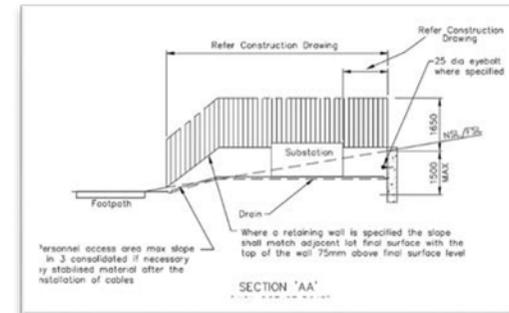


Figure 3 – Kiosk fencing information